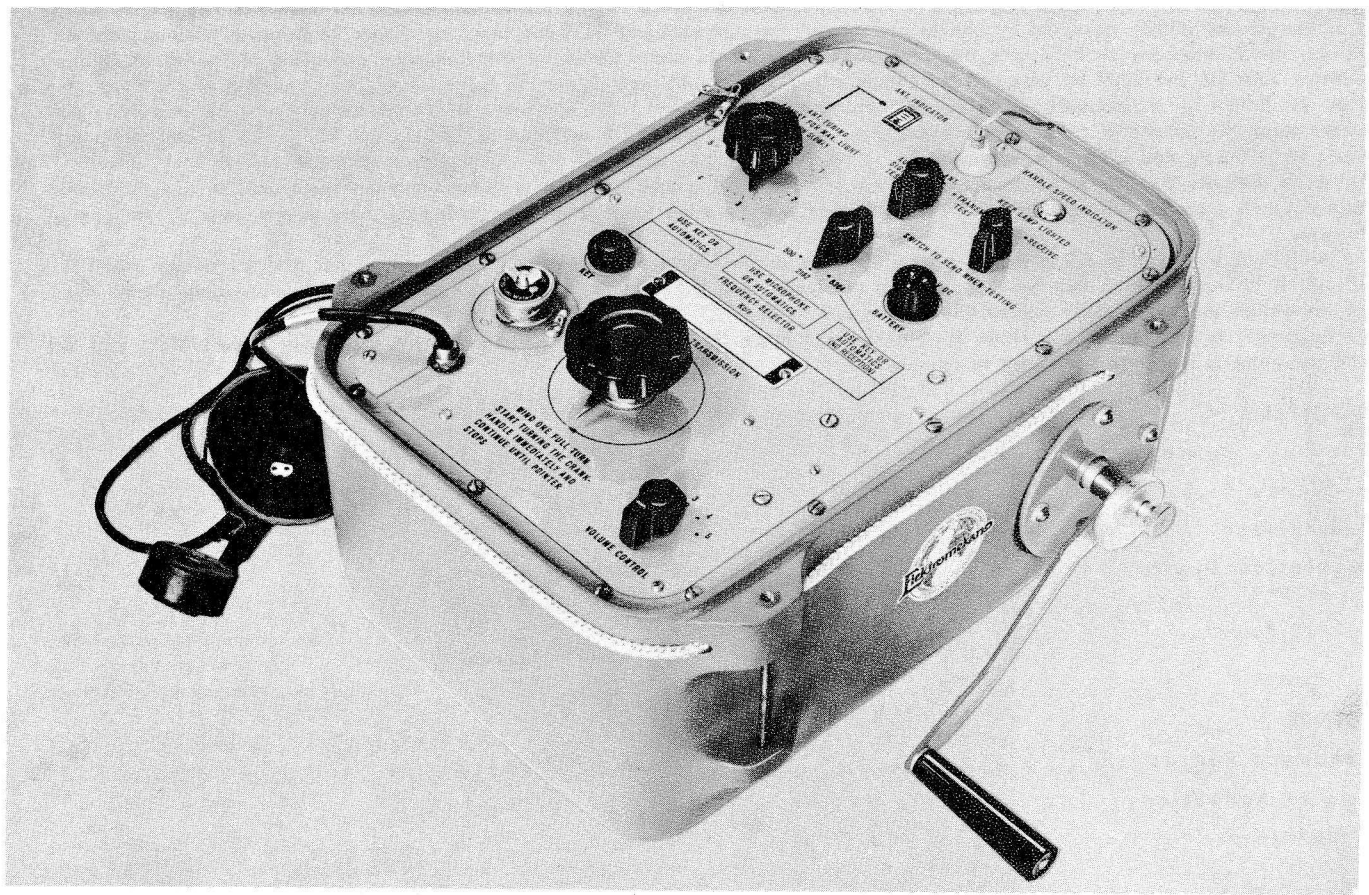


dansk radio aktieselskab



Light-weight three-frequency
Portable Lifeboat Radio

elektromekano SM118

fully transistorized transmitter and receiver - instant operation

automatic and manual transmission by three independent transmitters on international distress frequencies 500, 2182 and 8364 kHz

pre-tuned reception on 500 and 2182 kHz
2182 kHz crystal-controlled

glass-fibre case in life-saving yellow, designed so that the equipment is fitted for use in lifeboats as well as liferafts

simple tuning procedure

powered by built-in hand-driven generator
(it is possible to connect an external source of energy)

the equipment may be used together with a rod, wire or kite antenna

may easily be operated by unskilled personnel

Meets the requirements of the Safety
of Life at Sea Convention, London, 1960

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ELEKTROMEKANO's portable lifeboat radio set type SM 118 is designed to fulfil the applicable requirements of the International Convention for the Safety of Life at Sea, London, 1960, as well as the requirements of most countries of the world.

It has transmitting facilities for all three frequencies, 500 kHz, 2182 kHz and 8364 kHz with telephony on 2182 kHz. For each of the three frequencies a separate transmitter is used to ensure maximum reliability. On 500 kHz and 8364 kHz modulated telegraphy can be transmitted manually or by means of an automatic keying device providing the international alarm signal consisting of 12 four-second dashes separated by one-second spaces, the distress signal SOS and two long dashes for direction finding purposes. Besides normal telephony on 2182 kHz, the prescribed international alarm signal for this frequency consisting of the two audio frequencies 1300 Hz and 2200 Hz alternating with durations of 250 milliseconds can be transmitted. The automatic alarm signal devices are driven by a clockwork wound up by turning a knob one full turn. The movement is indicated by a pointer. When the pointer stops the automatic transmission ceases and the set is automatically switched to the manual key or the microphone. Receiver for 500 kHz and 2182 kHz is provided.

The set is designed for connection to a rod antenna when used in a rubber liferaft or a mast antenna when used in a conventional lifeboat. Both antennas are supplied with the equipment and the same knob is used for antenna tuning independent of the type of antenna.

The equipment is housed in a lightweight glass-fibre case suitable for use on board conventional lifeboats as well as in rubber liferafts. It is so sturdy that it may be dropped into the water from a height of 30 feet without suffering any damage. It will float and the yellow colour is easily perceptible on the sea surface.

The equipment is powered by a built-in hand generator. Since the set is fully transistorized the efficiency is very high, and the hand generator is therefore very easy to operate.

TRANSMITTER

Frequency Range and Emissions:

Frequency Stability:

Modulation:

Modulation Depth:

Output Power:

SPECIFICATIONS

500 kHz A2, 2182 kHz A3, 8364 kHz A2

Better than $\pm 0.02\%$

Collector modulation

A2 100% (square wave)

A3 70% - 95%

500 kHz: 1.0W-3.5W depending on antenna characteristics

2182 kHz: 1.5W-3.5W depending on antenna characteristics

8364 kHz: 1.5W-3.0W depending on antenna characteristics

RECEIVER

Frequency Range:

Type of Reception:

Bandwidth:

Sensitivity:

Image and I.F. Suppression:

A.F. Output:

500 kHz, 2182 kHz

A2 and A3

500 kHz: ± 5.5 kHz at 6 dB attenuation

± 13.5 kHz at 46 dB attenuation

2182 kHz: ± 5.5 kHz at 6 dB attenuation

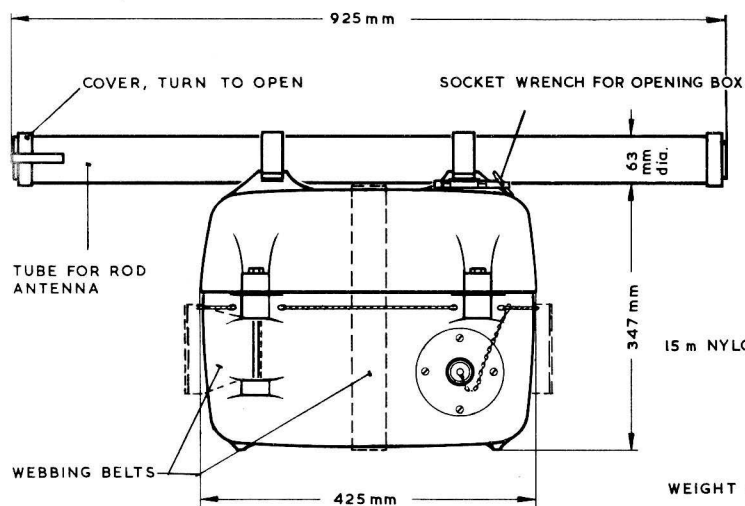
± 14.0 kHz at 46 dB attenuation

500 kHz: Better than 100 μ V for 15 dB signal/noise ratio

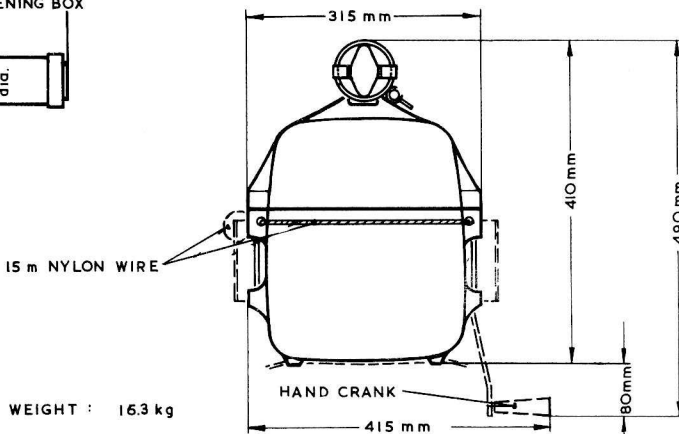
2182 kHz: Better than 32 μ V for 15 dB signal/noise ratio

2182 kHz: Better than 40 dB

Min. 1 mW



(All data are subject to possible alterations of design)



COMPLETE MARINE RADIO INSTALLATIONS ● RADIOTELEPHONE EQUIPMENT FOR SMALLER VESSELS ● MARINE RECEIVERS ● AUTO ALARMS
 DIRECTION FINDERS ● AUTOMATIC ALARM SIGNAL KEYS ● PORTABLE LIFEBOAT EQUIPMENT ● MOTOR LIFEBOAT EQUIPMENT
 SALINOMETER FOR FRESHWATER GENERATORS ● MEASURING INSTRUMENTS ● ECHO SOUNDERS FOR VERTICAL AND HORIZONTAL USE
 RADAR EQUIPMENT ● LORAN EQUIPMENT ● ANTI INTERFERENCE AERIAL EQUIPMENT FOR RADIO AND TV ● LOUDHAILER EQUIPMENT
 VHF MARINE TELEPHONE EQUIPMENT ● MAST AND ROD AERIALS ● FACSIMILE RECORDERS FOR WEATHER CHARTS. Please write for further details