## Bell and Gong type B \& G 500

Electronic Bell and Gong for use aboard vessels at anchor in restricted visibility


Ref. no. 24530062


Electronic Timer TI 65
Ref. no. 24530190

## General Information

According to the International Regulations for Preventing Collisions at Sea 1972, Rule 33, vessels of 12 m in length or more shall be equipped with a bell, and vessels of 100 m or more shall, in addition, be provided with a gong with the tone and sound which cannot be confused with that of the bell. The device shall produce a sound pressure level of not less than 110 dB at 1 metre. The electronic B \& G 500 system is especially developed to meet these regulations.

The Bell and Gong sound emitters are identical, electrodynamic and omnidirectional. They are, also, small and compact compared with many other loudspeaker constructions. The construction is advantageous from different aspects - not only the aesthetic.

By means of modern electronics, a Power Amplifier BG 200 supplies the sound emitters with various signal characters. To emit the prescribed signal characters, the Bell and Gong units are controlled by an Electronic TimerTI 65 designed for panel mounting. The timer has an operating switch and three indicating LED lights.

## Power Amplifier BG 200

The Power Amplifier BG 200 consists of a mounting plate with a DC/DC unit and an amplifier. It only requires 24 V DC 10A.

The Power Amplifier BG 200 is to be mounted under a panel, or similar, and protected against water. When signalling, the unit will be warm and will, therefore, require good air circulation.

## Electronic TimerTI 65

The Electronic TimerTI 65 is in principle a converter by means of which the direct current from a battery or DC generator is treated by a microprocessor to an alternating current of a frequency and wave form suitable to feed the horn. A quartz crystal keeps the frequency superstable, and the digital oscillator followed by the Power Amplifier BG 200 gives an extremely high efficiency and reliability in the conversion process.

Repeating signal characters for ship at anchor


Repeating signal characters for ship aground


## Spare Parts, Dimensions and Wiring Diagram

## Bell and Gong B \& G 500

## Technical Data

Ref. no. 24530062
Sound modules are made of anodized aluminium with distance pins of stainless steel.
Mast fitting for a 2" supporting pipe of galvanized steel.
All cables placed in the distance pins and drawn to a connector in the lower module.
Sound pressure level (min.): 110 dB at 1 m
Temperature range: $-30^{\circ} \mathrm{C}$ to $+60^{\circ} \mathrm{C}$
Weight excl. drivers: ca 17 kg
Weight of driver: ca $3,5 \mathrm{~kg}$
Spare Parts
Driver, ref. no 20620022


## Power Amplifier BG 200

## Technical Data

Ref. no. 25530040
Outer dimensions: $485 \times 275 \times 90(\mathrm{~L} \times \mathrm{H} \times \mathrm{D})$
Power consumption: max. 240W
Voltage: 24V DC (min. 20, max. 30)
Options: 230 AC $50 / 60 \mathrm{~Hz}, 230 \mathrm{~V}$ DC 115 V AC $50 / 60 \mathrm{~Hz}, 115 \mathrm{~V}$ DC, 12V DC Please state voltage when ordering.

## Spare Parts

1 DC/DC 24/12, ref. no: 20142034
2 Amplifier
Fuse $5 \times 20$ 10AS


## Electronic Timer TI 65

## Technical Data

Ref. no. 24530190
Voltage: 12V DC (supplied from BG 200)

## Operation

1 green LED shows ON position
2 orange LED:s show Bell and Gong signals.
Built-in software, can be modified for other signal characters.

## Spare Parts

Fuse: $5 \times 20500 \mathrm{mAF}$
Microprocessor: P73029
Prom: P73030
Switch


Knob

Side view

## Wiring Diagram



Spare Parts can be obtained from Kockum Sonics or their agents.
(mm) When ordering, please, give reference number and part name.

