Ref.no. 24510102



# **Signal Controller TI 96**

## Automatic Signal Controller for whistle and lamp

Ref.nos. 24510106 / 07 (depending on period time)



Ref.no. 24510104





### Signal Controller TI 96

### Please use the following Ref. No. when ordering:

			9.
Ref.no.	24510102	90 sec./period time	For installation on ships with less than 100m between the whistles (grey)
Ref.no.	24510104	90 sec./period time	For installation on ships with less than 100m between the whistles (black)
Ref.no.	24510106	90 sec./period time	For installation on ships with more than 100m between the whistles (grey)
Ref.no.	24510107	60 sec./period time	For installation on ships with more than 100m between the whistles (grey)

### **General Information**

Signal Controller TI 96 is a robust, simple, inexpensive unit which can be installed in all types of vessels. Two types are available. One type for vessels with more than 100m between whistles and one type for vessels with less than 100m between

TI 96 can be controlled by external push-buttons (see wiring diagram overleaf).

It must be noted that when the whistle is activated by the external push-button, the automatics will stop. The external push-button does not control the lamp output.

### **Automatic Signalling**

The automatics have six signal characters.

All characters can be used for the whistles or the lamp or both simultaneously.

The period time is always 90 seconds (optional 60 seconds).

The automatics start when the symbol switch is turned to the required position even if the switch before starting is in the OFF/RESET position or at another symbol.

The red LED lights steady, when unit in automatic operation. When a push-button is activated the red LED on the front starts to flicker, to give the operator the information that the automatic is stopped.

The automatics switch off in OFF/RESET position.

It can also be switched off by pressing the push-button HAND. The symbol switch should then be turned to the OFF/RESET position.

The indicating LED extinguishes when the symbol switch is in OFF/RESET position only indicating that the Signal Controller is shut off.

It is also possible to change the symbol (whistle, lamp or whistle plus lamp) during signalling by turning the symbol switch direct to the required position. If the automatics have been shut off via the hand push-button and the symbol switch still being in the previous position, the automatics can be re-started with the same symbol by turning the switch to the nearest position and then quickly back to the previous position.

### **Manual Signalling**

The push-button HAND is for manual signalling. It shuts off an "automatic" signal even during signalling. A mains failure also shuts off the automatics.

The internal push-button control output as per symbol switch. If the switch is in the position "OFF/RESET" then the HAND push-button will activate the sound .

### Signal Controller TI 96 Technical Data and Dimensions

#### **Technical Data**

Voltage supply: 9-15,6V DC or 18-31,2V DC

Power consumption: 0,2 - 0,1A

Max. voltage: 250V Relay contactor: Max. current: 6A Dimensions: 206 x 116 x 70 (L x H x D)

Weight: 1,7 kg Cable area: 0,2 - 6 mm2

Max cable diameter: 14 mm Grey RAL7035 for Ref. No. 24510102 Colour:

Grey RAL7035 for Ref. No. 24510106 Grey RAL7035 for Ref. No. 24510107 Black RAL9005 for Ref. No. 24510104

IP23 Protection class:

The unit is CE-marked.

Units can be obtained from Kockum Sonics or their representatives. When ordering, please, give reference number and part name.

#### **IMPORTANT!**

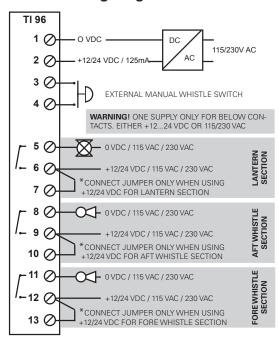
To meet the requirements for EMC-protection:

- Always use shielded cables.
- Be sure to properly connect the unit to ships ground.
- Connect the cables shield to the units cable clamps.

Only one power supply is permitted. If 115/230V AC is to be used for TYFON and LANTERN section, an AC/DC adaptor must be used to supply the TI96 on terminal 1 and 2.

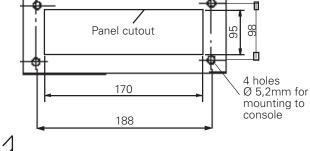
The external manual switch must be able to handle 230V AC.

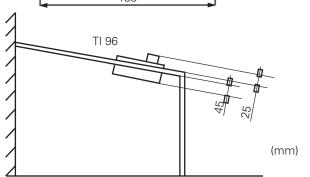
### Wiring diagram



THESE JUMPERS ENABLES INBUILDT SPARK SUPPRESSORS WHEN +12/24 VDC IS USED FOR LANTERN/WHISTLE

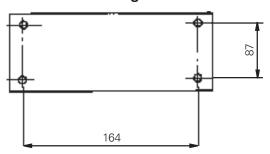
### Panel mounting

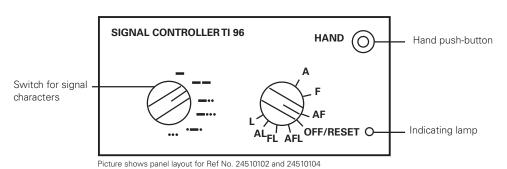




Accessories				
Name	Ref.no.			
Adaptor 230V AC to 12/24V DC	20142030			
Adaptor 115V AC to 12V DC	20142031			
Fuse for relay contact - 6A slow blow	20556260			
Fuse for internal electronics - 1A quick blow	20550100			

### **Bulkhead mounting - Rear view**





- Sound aft - Sound fwd
- ΑF
- Sound aft and fwd
- AFL - Sound aft, fwd and lamp
- FL - Sound fwd and lamp
- ΑL - Sound aft and lamp
- Lamp

