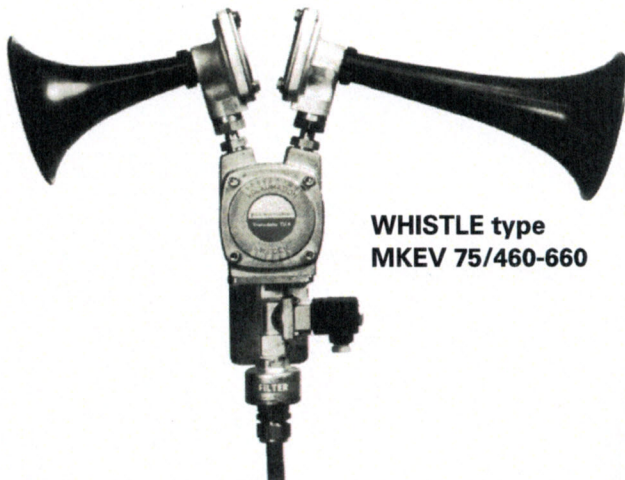


Tyfon® -75 Alarm System

For selective acoustic signalling aboard ship



**WHISTLE type
MKEV 75/460-660**



**WHISTLE
MKTV 75/800**

**WHISTLE type KTV
75/400**

General features

The Alarm System WHISTLE -75 is a modern acoustic signalling system for Selective highpower Alarm for use aboard ship in order to:

- Be instantly distinguished from other kinds of sound signals.
- Be heard with a good margin above loud engine noise.
- Function safely — even under hard operating conditions.

These are some of the requirements met by the WHISTLE series MKT 75/-. The material for all parts is chosen to withstand modern environmental demands as to corrosion, vibration, etc. In all WHISTLE units, the diaphragms — virtually unbreakable — are correctly fitted and therefore need no adjustment.

Contents of system

The Alarm System TYFON -75 comprises:

- **Fire Alarm** — frequency 800 Hz.
Coded or intermittent blasts, e.g. with a cycle of about 2 seconds, signal and silence periods being equal in length.
- **CO2 Alarm** — frequencies 460–660 Hz
Altering two-tone signal with 1 to 2 blasts per second.
- **Engine Alarm/Telephone Signal** — frequency 400 Hz.

Single or recurrent blast with long intervals.

The choice of frequencies with great mutual differences and also the specially recommended time scheme have been preceded by practical tests in co-operation with auditory-medical experts. Since the signals are selective, even an unmusical person will understand what kind of alarm is sounding. For coding suggestions and arrangement, see last page.

Solenoid Valves are delivered for standard voltages 115–130, 230–240V AC and 12, 24, 115 and 230V DC. On all valves, a filter is fitted at the inlet side. For MKEV 75/460–660, the connection is pipe thread 1/2" and for the other types, pipe thread 1/4".

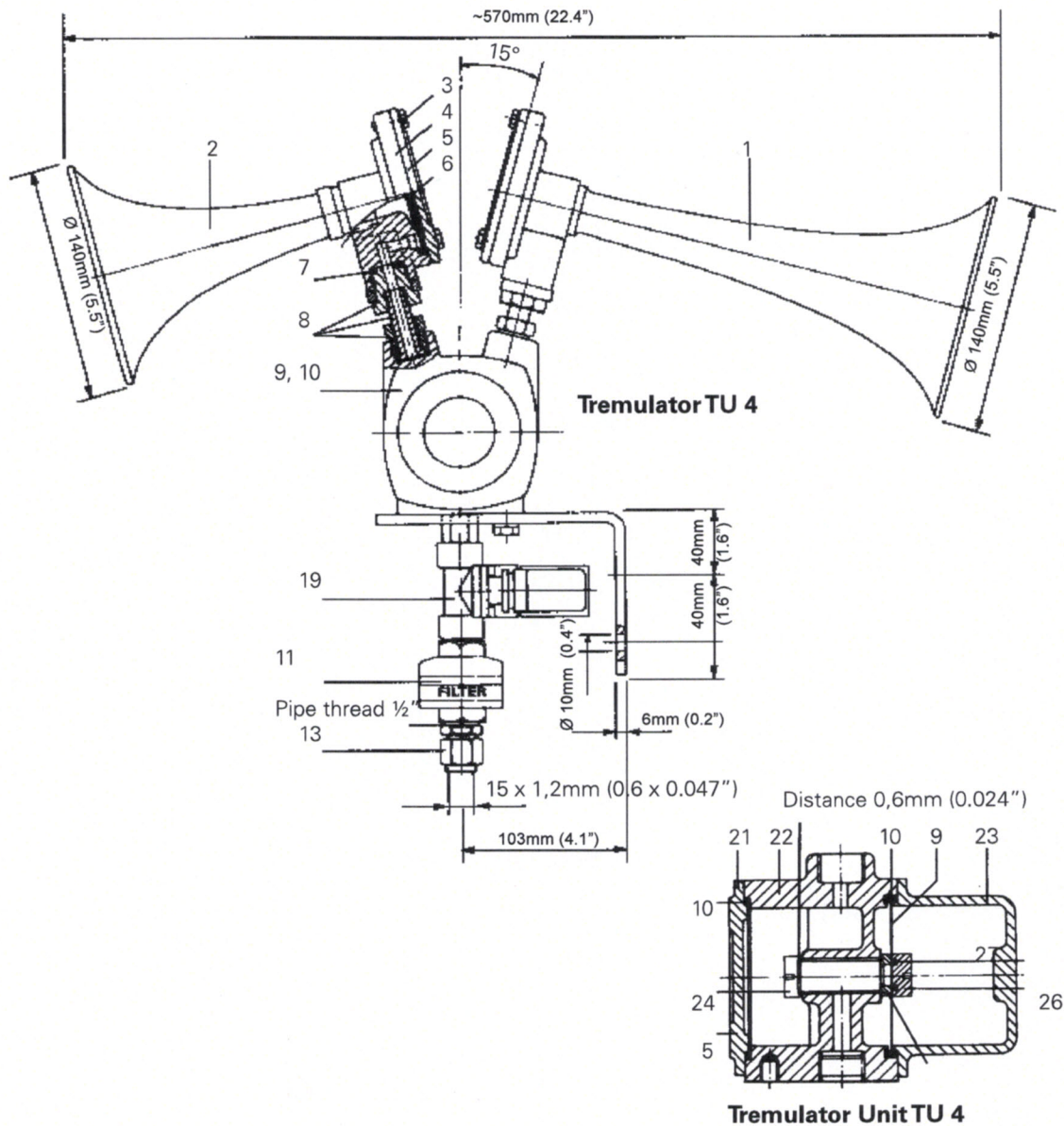
Air consumption is approximately 4 to 5 litres per blast second. All signal units are normally choked for a working pressure up to 0,7 MPa overpressure.

Sound level, measured at a distance of 1 m, is over 130 dB, except for the engine alarm signal and telephone signal which, having a deep non-irritating tone, is on a level of about 120 dB.

Sordine may be applied to the resonance horn if the apparatus is located in a place where the sound intensity is annoying, for instance when WHISTLE KTV 75/400 is for the engine alarm or pump room telephone etc.

For explosive, corrosive or very hot areas, the solenoid valves can be removed and mounted separately, or alternatively be replaced by manual push button valves.

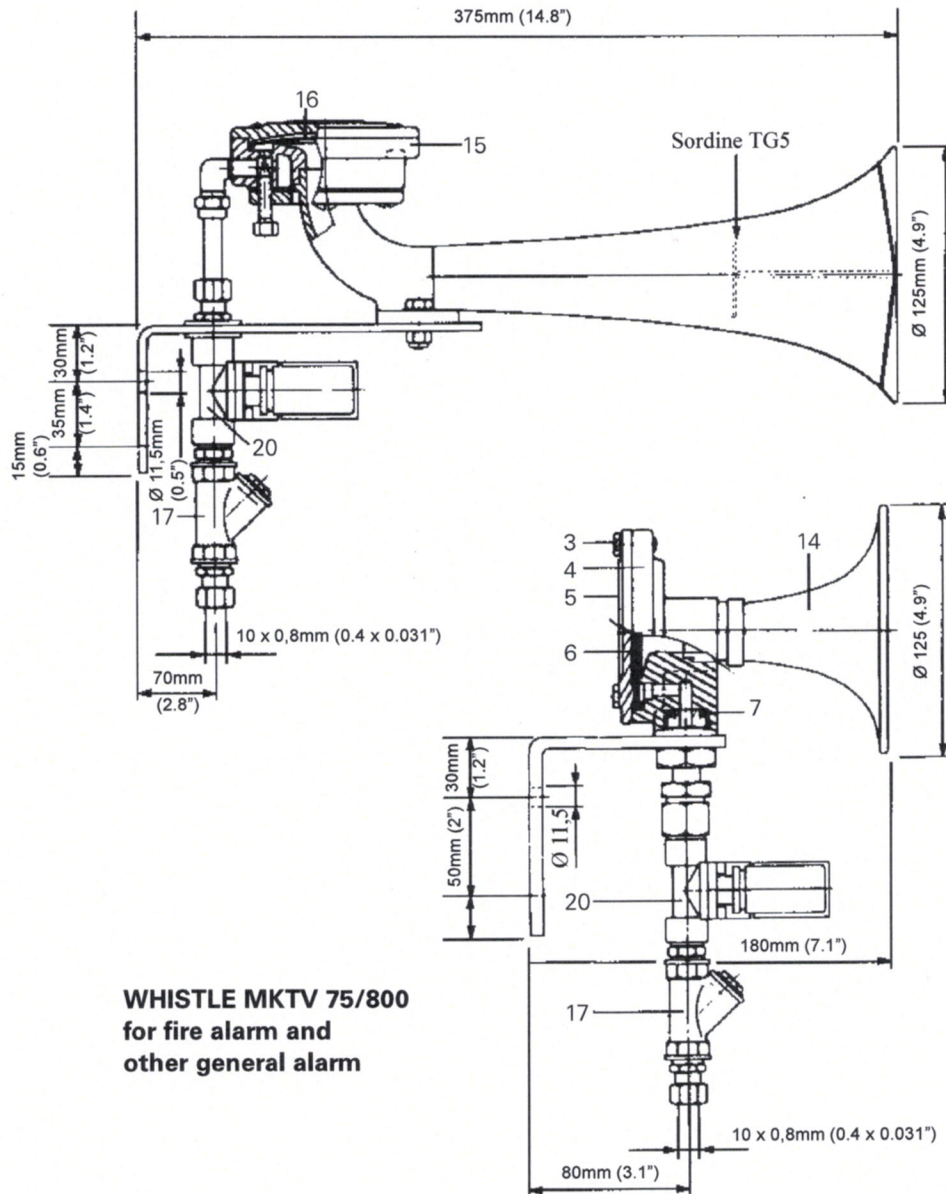
TYFON MKEV 75/460-660 CO₂ Alarm. Alternating two-tone signal



Technical Data			
WHISTLE type	MKEV 75/460-660	MKTV 75/800	KTV 75/400
Frequency (basic)	460 Hz, 660 Hz	800 Hz	400 Hz
Sound pressure level at 1 m (3')	> 135 dB ₁	> 130 dB	120-135 dB ₂
Normal air consumption (free air)	5 l/s (0.18 cfs)	4 l/s (0.14 cfs)	2-5 l/s (0.07-0.18 cfs)
Valve type	TV 91	TV 88	TV 88
Working pressure (overpressure)	0,5-1,2 MPa (725-174 psi)	0,5-1,2 MPa (725-174 psi)	0,5-1,2 MPa (725-174 psi)
Valve orifice	Ø 12 mm (0.5")	Ø 8 mm (0.3")	Ø 8 mm (0.3")
Power consumption:			
AC 50/60 Hz, 110-130 V			
220-240 V			
In-rush	50 VA	16 VA	16 VA
Nominal	24 VA	8 VA	8 VA
DC 12, 24, 110, 220 V	12 W	10 W	10 W
Weight	9 kg (19.8 lbs)	2 kg (4.4 lbs)	1,5 kg (3.3 lbs)

1) Can be reduced by choking
2) Adjustable by means of screw

TYFON KTV 75/400 for engine alarm and telephone signals etc.

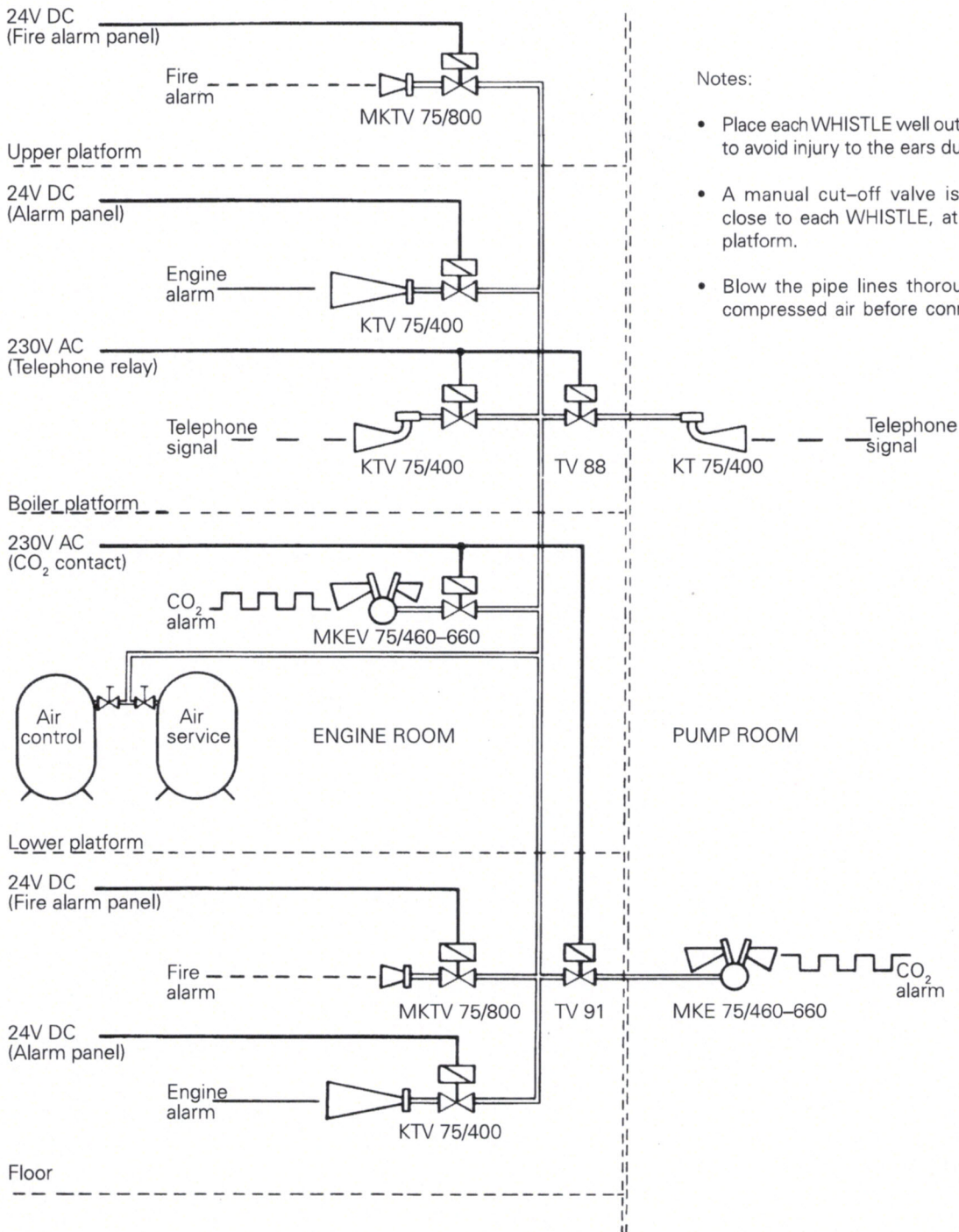


WHISTLE MKTV 75/800
for fire alarm and
other general alarm

Part numbers							
No.	Name	Material	Ref. no.	No.	Name	Material	Ref. no.
1	Horn 460 Hz	Thermoplastic	32170870	17	Filter 1/4"	Brass	32171408
2	Horn 660 Hz	Thermoplastic	32170874	18			
3	Screw	Stainless steel	32570288	19	Valve unit TV 91*	Brass	
4	Housing	Brass	21754008	20	Valve unit TV 88*	Brass	
5	Cover	Brass	21754005			Coil TV 88/91	
6	Diaphragm KM 75 C	Titan/nitrile rubber	21758003			220 V 50 Hz	21772074
7	Packing	Rubber	37690947			110 V 60 Hz	21772075
8	Fitting compl.	Brass	39881054			110 V 50 Hz	21772076
9	Diaphragm MTU 4	Stainless steel	21758001			220 V 60 Hz	21772077
10	O-ring 69,5 x 3,0	Nitrile rubber	37690031			24 V DC	21772078
11	Filter 1/2"	Brass	32170418	21	Screw MC6S 6 x 16	Stainless steel	32570288
13	Fitting GA 15	Brass	32300250	22	Tremulator housing	Brass	21754001
14	Horn 800 Hz	Thermoplastic	32171259	23	Tremulator cover	Brass	21754002
15	Cover	Plastic	32171136	24	Spindle	Plastic	21768120
16	Diaphragm KM 75 BT	Titan/nitrile rubber	39880291	25	Washer	Plastic	21768121
				26	Screw	Plastic	21768122
				27	O-ring 9,2 x 2,4	Nitrile rubber	20862050

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

Typical arrangement for large vessels



Notes:

- Place each WHISTLE well out of passage ways to avoid injury to the ears during signalling.
- A manual cut-off valve is recommended close to each WHISTLE, at least 3m above platform.
- Blow the pipe lines thoroughly clean with compressed air before connecting to signal

Coding Suggestions

Whistle type	Alarm	Signal pattern	Tone freq. in Hz
MKTV 75/800*	Fire	-----	800 (660 on request)
MKEV 75/460-660	CO ₂	~~~~~	460-660
KTV 75/400	Engine failure,	- - - - -	400
	telephone, etc.	—————	400

* MKTV 75/800 or MKTV 75/660 can also be used for general purposes.

- Valves for signals in the pump room are located in the engine room.
- Time control of all apparatus is done externally by means of ordinary electrical control systems aboard ship. In principle, the time scheme desired can be chosen — except for the two-tone CO₂ signal which is coded by a pneumatic device.
- One of the valves for engine alarm is arranged with its coil normally energized, to indicate voltage failure (24V DC).

Subject to alteration without notice.