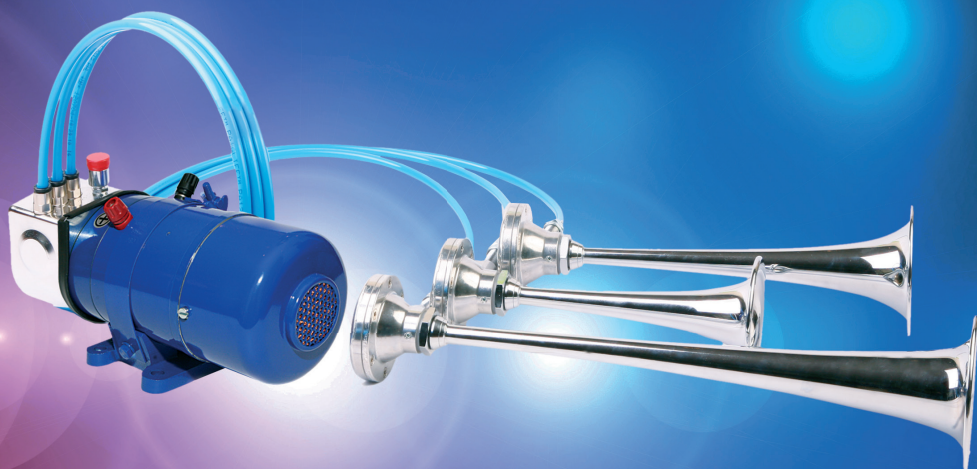


Installation instructions & maintenance

MARTIN-HORN®
... das Original!

Schweizer Alpenpost 2094 PM for Swiss post buses



DEUTSCHE SIGNAL-INSTRUMENTEN-FABRIK
Max B. Martin GmbH & Co. KG



INSTALLATION AND MAINTENANCE INSTRUCTIONS

1. Description

1.1 Electric blower

A series-wound motor with centrifugal blower generates the compressed air for the acoustic horn(s). The valve regulates the air in the rhythm of the signal into the respective acoustic horns whilst a shift cylinder with a micro switch automatically interrupts the electricity after a signal duration of 3 seconds.

The motor can be supplied for 12 or 24 Volt DC.

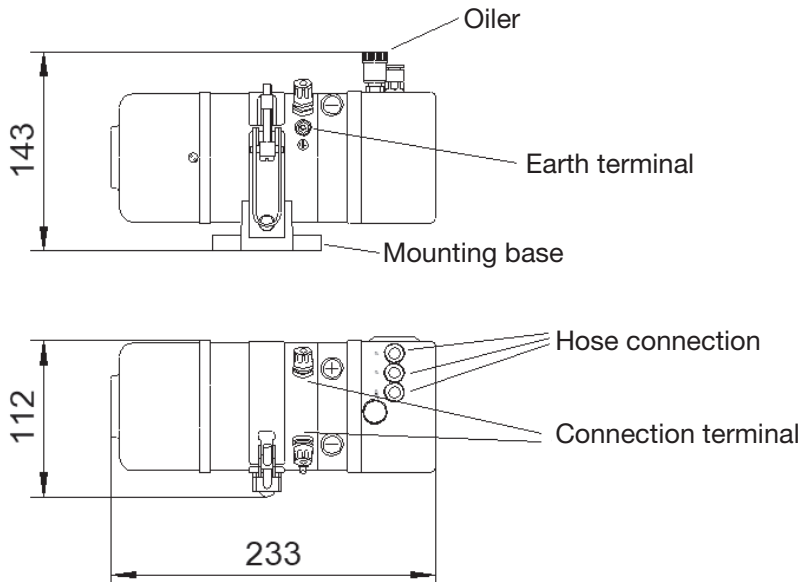
The power consumption is around 150 Watt. The connected values are indicated on the rating plate.

1.2 Diaphragm acoustic horn

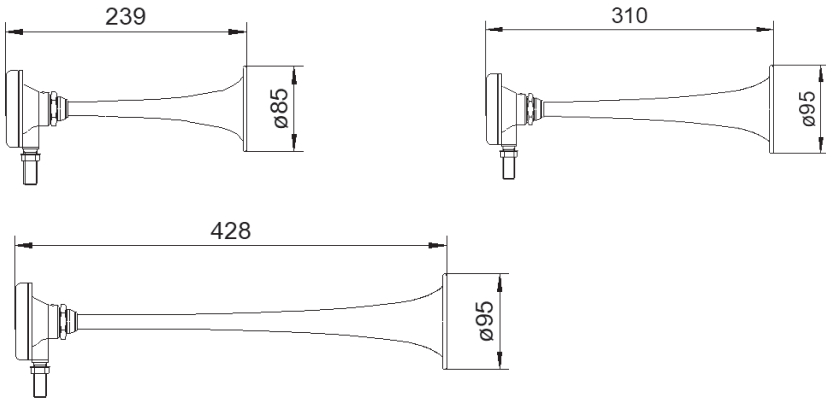
Every diaphragm acoustic horn consists of a membrane housing and the actual acoustic horn.

1.3 Main dimensions

1.31 Electric blower



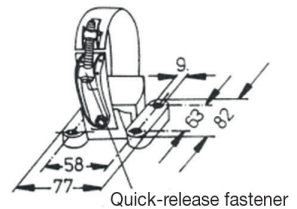
1.32 Acoustic horn



2. Installation

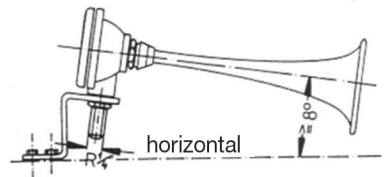
2.11 Attach the electric blower in a protected spot (protected from spray)

2.12 Open the mounting base strap. Remove the blower. Bolt the base to the desired spot. The reinforcement plate can be used as a drilling template.



2.13 Place the electric blower back into the mounting base and tension the quick-release fastener.

2.14 Attach the membrane acoustic horns such that they cannot be damaged by spray, i.e. water can run off. The membrane acoustic horns should be attached with an angle of inclination of 8° . They should be arranged such that no other parts are located directly in front of the acoustic horns.



2.15 Connecting hoses

The smallest bend radius is 50 mm. Maximum hose length 10 m

2.16 A hose grommet and union nut and hose clamp is attached at one end of every hose. Remove the protective plugs and screw them onto the acoustic horns. Then lay the cables for the blower. If the hose is too long, cut the excess piece off straight at the end using a knife. Ensure that the hose is not pressed together.

- 2.17 Remove the protective plugs from the electric blower. Insert the hoses as far as they will go in the couplings. Follow the connector labels: cis" to cis", e' to e', a' to a'. If the air hoses have to be removed again, press the black ring on the coupling down and pull out the hose. Ensure that no foreign objects enter the connecting pieces or hoses and that the connections are sealed.

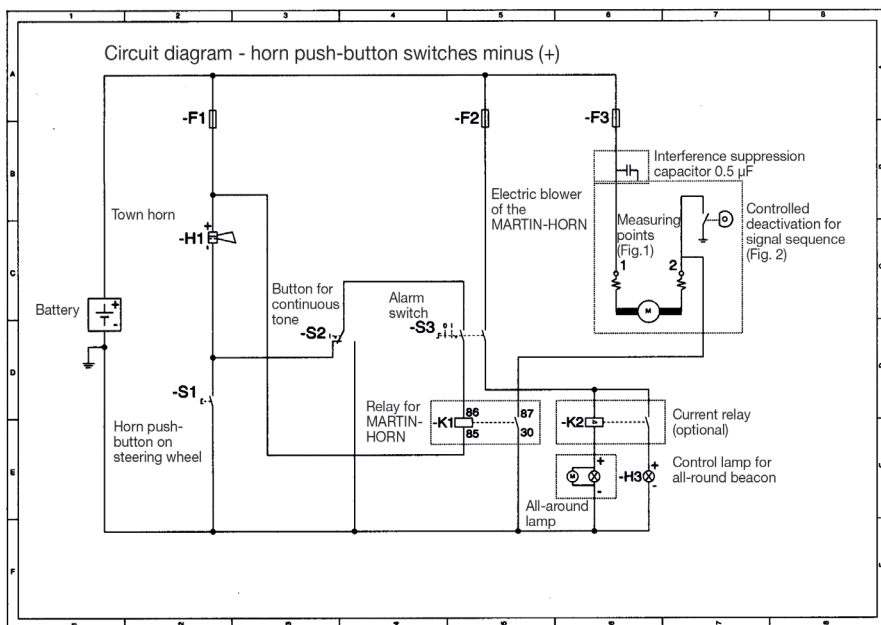
3. Electrical connection

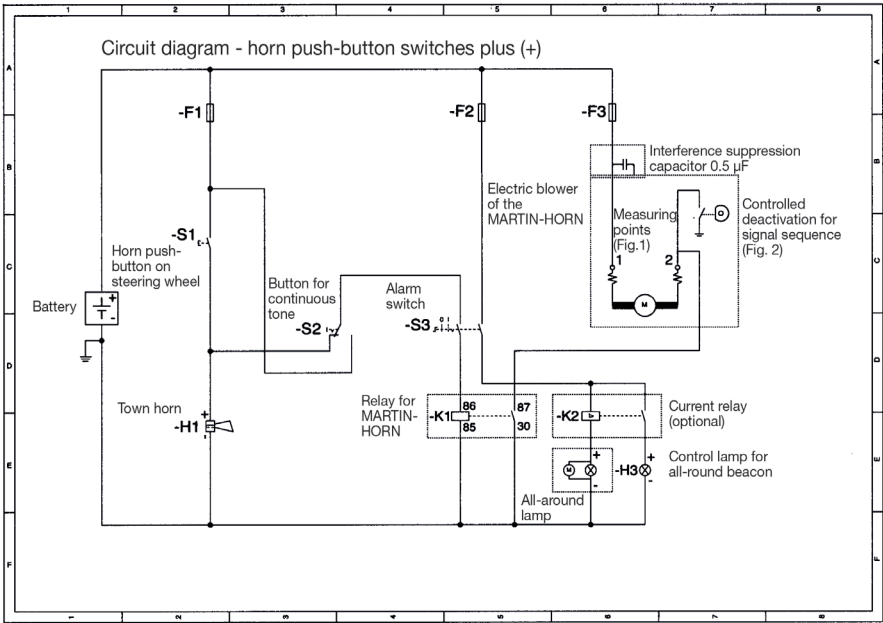
3.1 Nominal current, fuses and cable cross-sections

Nominal voltage	Current consumption	Fuse	Cable cross-section
12 Volt	12 A	16.0 A	4.0 mm Cu
24 Volt	6 A	6.3 A	2.5 mm Cu

The lines should be as short as possible. If the lines are longer than 2 m, use the next strongest cross-section.

- 3.2 Check the voltage at the terminals of the electric blower. It should be **at least** 90% of the battery's nominal voltage when the horn is switched on. If it is less, then the lines, including those from the battery to the fuse, must be intensified or replaced with stronger ones, as per Table 3.1





4. Maintenance

Oil the blower unit. Every 6 – 8 weeks (depending on frequency of use), fill the wick oiler with special MARTIN oil. Every MARTIN-HORN® comes with a small can of special oil. It can also be reordered at any time. Never use normal machine or engine oil.

No further maintenance is required thanks to the steadily improved high quality of all parts (corrosion protection provided by galvanic processing, rounded polishing of the shaft running surfaces, etc.). If the MARTIN-HORN® should malfunction due to an accident or for any other reason, please send it in for inspection and repair. If repairs are carried out by a third party, then any guarantee claims cannot be accepted.

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