

Technical Manual

MC 36 A

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Thank you very much for your confidence!

We want to congratulate you on your Big Dutchman

MC 36 A computer

and we are convinced that you will be satisfied with it.



EC Declaration of Conformity

We declare that the design and model of the machine described above being placed on the market by ourselves complies with the relevant health and safety requirements of the EC Directive.

Guarantee Declaration

This machine is guaranteed in accordance with the **Big Dutchman** International GmbH General Conditions of Sale for customers resident in Germany and the **Big Dutchman** International GmbH International Conditions of Sale for customers not resident in Germany.

Note

In order to ensure that your new equipment will always work properly and efficiently and to ensure your personal safety, we would ask you the following:

Please read through this User Manual thoroughly and take particular note of the warning and safety instructions before starting up the machine for the first time.

Programme Version:

The product described in this manual is computer based, and most functions are realised by software. This manual corresponds to:

SOFTWARE VERSION 4.1

It was released in March 2001.

Produkt and documentation revision:

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IMPORTANT

NOTES CONCERNING THE ALARM SYSTEM

Where climatic control is used in livestock buildings, break-downs, malfunctions or faulty settings may cause substantial damage and financial losses. It is therefore most ***important to install a separate, independent alarm system***, which monitors the house concurrently with climatic control. Please note that the product liability clause of BIG DUTCHMAN A/S's general terms and conditions of sale and delivery specify that an alarm system ***must be installed***.

We want to draw your attention to EU-directive No. 998 of 14/12-1993 concerning minimum requirements for domestic animals which specifies that an alarm system must be installed in any house which is mechanically ventilated. In addition to this, there must be a suitable emergency system.

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1. INTRODUCTION

This manual describes installation and setting up of the Euro Matic MC 36 A climate computer.

The MC 36 A climate computer has been developed to give complete climatic control of all types of livestock buildings where it can monitor and control the environment.

MC 36 A consists of a basic unit into which optional equipment can be installed, if required. The MC 36 A has been designed to accept an Euro Matic data module to allow the connection of a number of individual MC 36 A computers to one PC. Facility is included for the connection of external emergency opening using the MC 78 A.

Thanks to the high flexibility nature of the MC 36 A, the most productive climate control settings can be achieved at all times.

For your convenience, a copy of Section 2 of this user's guide is printed on a card. It should be inserted behind the opening panel of MC 36 A so it is always available.

BIG DUTCHMAN congratulate you on your choice of a
MC 36 A CLIMATE COMPUTER

2. INSTALLATION

2.1 Introduction

The installation section describes MultiStep® - ventilation, installation, setting and testing of MC 36 A climate computers.

2.1.1 Description of MultiStep® - Ventilation

BIG DUTCHMAN has developed MultiStep®, a method to control a number of outlet units stepwise, however with stepless exhaust. The computer controls one or two outlet unit(s) steplessly from 0-100%, while the rest of the outlet units are connected stepwise as required. Thus power savings of 40-70% are obtained.

Each outlet unit is equipped with a CL 74A swivel shutter motor to open and close the swivel shutter.

CL 74A V is used for the stepless outlet unit(s). The internal speed controller of MC 34H A adjusts the fan revolutions. The fan must always be single phase otherwise an external MC 23U must be used.

CL 74A ON/OFF is used for the outlet units in step 1 to 6. When the flaps open, the fans start via a built-in contact. These fans will then run in minimum. The fans could be single phase or three phase. If three phase is used, the CL 74A ON/OFF winch motors should be equipped with contactors controlled by a built-in contact. Furthermore, the system can work with air controlled flaps (gable fans).

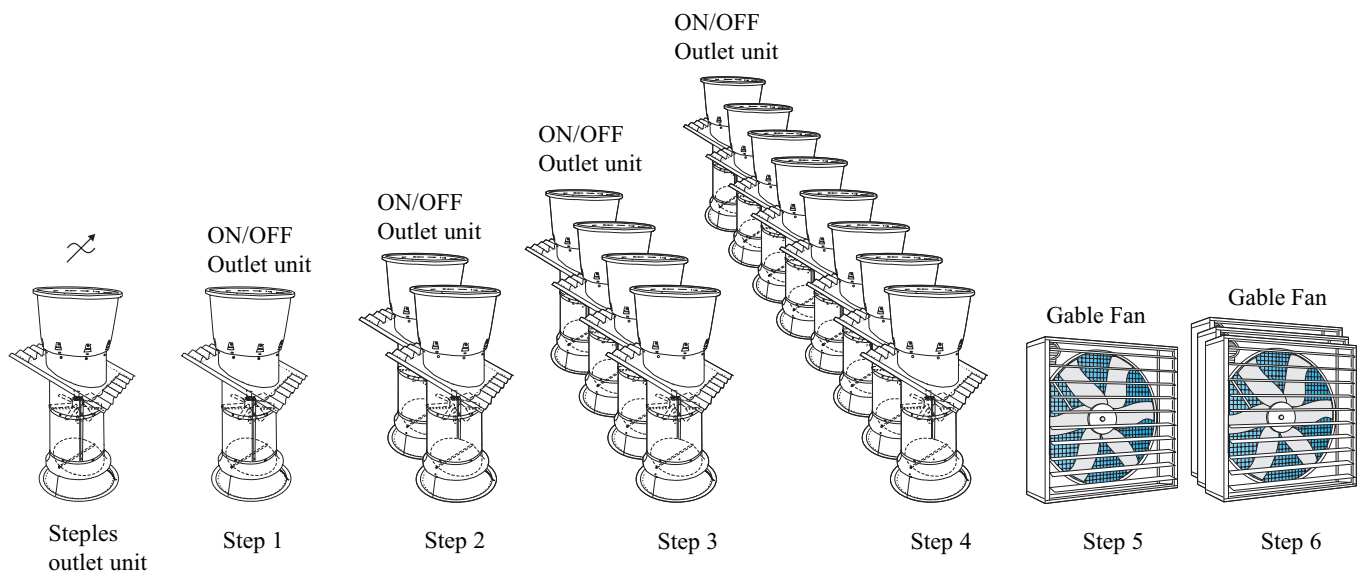


Figure 2.1.1-1 Example of MultiStep® exhaust

2.1.2 Unpacking

The MC 36 A climate computer lies at the bottom of the box. Up top you will find bags holding the manual and the folded user's guide, mounting screws/plugs, sensors and any accessory modules to be used together with this particular control unit. On the outside of the packaging there is a check list specifying the accessories enclosed.

2.2 Mechanical Installation

The mechanical installation section deals with installation of MC 36 A, installation of climate sensors and installation of accessory modules, if any.

2.2.1 Opening of MC 36 A

- 1) Open the lower cover plate by lifting at the bottom.
- 2) Remove the protective plate behind the cover plate. Loosen the screws but do not remove them.
- 3) Loosen the 2 screws in the control panel. Place the tilted panel on top of the computer during the electrical installation. Be careful, as the panel screws may fall off.
- 4) The lower cover plate can be removed during the electrical installation by removing one of the screws.
- 5) Having completed the electrical installation slide the folded User's Guide into the cover plate.

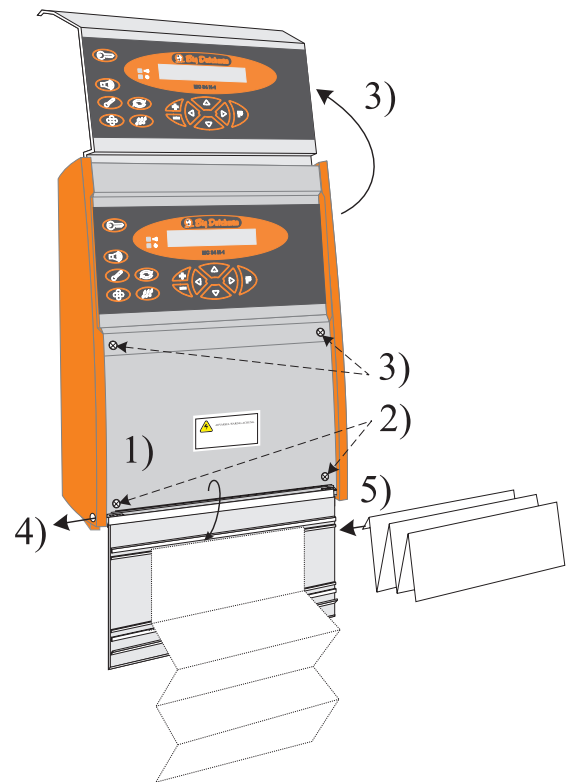


Figure 2.2.1-1 – Opening of MC 36 A

2.2.2 Mounting of MC 36 A

Hold the MC 36 A up against the wall making sure that the display is at the daily operator's eye level.

Mark the location of the two mounting screws through the rear holes in the MC 36 A.

Align the marks horizontally.

Bit dimension 8 mm.

Rubber washers are for sealing under the screw heads.

Remember to leave sufficient space around the MC 36 A to allow for AUT/MAN operation of the emergency switches and for the control panel to be placed on top of the cabinet.

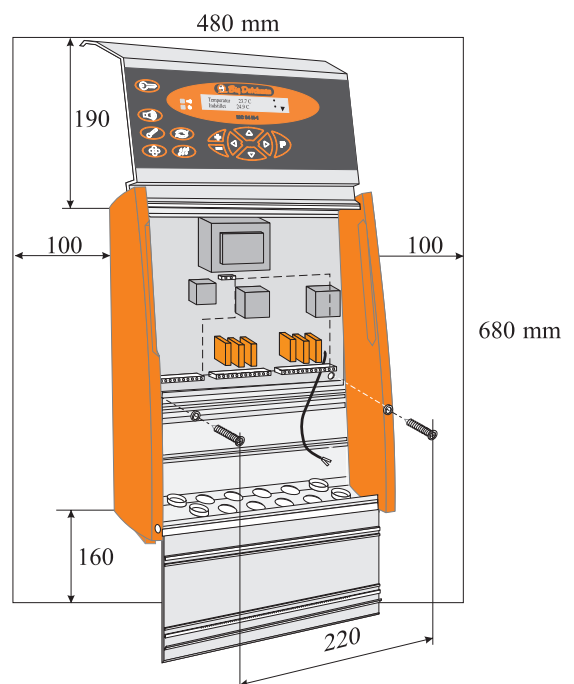


Figure 2.2.2-1 - Mounting of MC 36 A