



*reliable + quick
informed*

alcona
Automation

MilkGuard

Tank 1: 4.3°C
cooling active



alcona

MilkGuard

monitoring + early warning via mobile phone

**Internet enabled
operation**

**Installed
without drilling**

**Adjustable
limit values**

**12 month
online archive**



The device complies with the German Milk Delivery Directive promulgated by the German Milk Association.



reliable + quick informed installed without drilling online customization

The new **Milk Guard** fromalcona Automation GmbH gives you a reliable **monitor for your milk tank** in accordance with the **latest statutory regulations** and local dairy requirements.

The Milk Guard controls the following parameters:

- Milk refrigeration temperature
- Agitator function
- Cleaning temperature and duration
- Power failure and refrigeration malfunction
- Storage duration milk

Monitored by mobile phone alarm *Automatic alarms are generated when limit values are exceeded. Farmers are notified promptly via horn, phone call and SMS.*

If the milk no longer meets quality standards, a **“Load Warning” function** is generated, notifying the driver of the milk tanker truck via strobe light.

All values are tracked, logged and archived, and are therefore available for up to 12 months.

Thealcona Milk Guard is **easily** retro-fitted into already existing and even new milk tanks. All commercially available tanks are supported. The Milk Guard is supplied with sensors that track the required readings.

These sensors are easily installed without harming the tank.

No additional drilling is required on the tank. The inside or outside tank walls are therefore not damaged.

Your tank remains unharmed



One Milk Guard can monitor up to **4 tanks simultaneously**. This minimizes investment costs and reduces the workload.

Up to 4 tanks

The device operates **fully automatically** by reading the required values from the tank and by generating the corresponding alarms and parameters based on these. Routine operation and/or manual intervention is not required.

Labor reduction

With the help of the **integrated rechargeable battery**, the operation of thealcona Milk Guard is ensured even **during a power failure**. In this case, the grid failure is reported accordingly.

Power grid monitoring

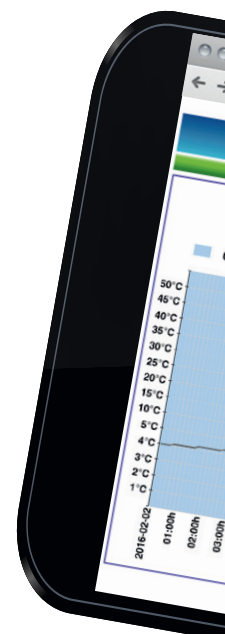
The device generates the following error messages:

Per tank:

- MIN temperature milk
- MAX temperature milk
- MIN temperature cleaning
- MIN duration cleaning
- MAX time until clean
- Agitator malfunction
- Refrigerator malfunction
- MAX storage duration milk

General:

- Power failure
- GSM network
- SIM card
- battery



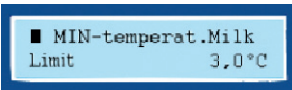


FrieslandCampina 

The device complies with the campaign „Foqus planet“ from FrieslandCampina and is active recommended from FrieslandCampina

Errors are generated with **limit values** based on user-programmable parameters. The Milk Guard configuration can therefore be customized to local conditions.

Custom parameters



The Milk Guard also generates a **“Load Warning” message** when the milk quality drops below the specified limit values from the directive. This is accomplished based on the following criteria:

- Maximum milk temperature
- Minimum cleaning temperature
- Agitator function
- Power failure

Full customization

The criteria/limit values mentioned above can be customized on the unit with **password-protected parameters**.

Safety

Straightforward operation

The display and buttons intuitively illustrate the unit status. The straightforward operation is designed for user-programmable setting adjustments, such as storing telephone numbers for phone calls or text messages (SMS).



Automatic alarm

The farmer receives an **acoustic and telephone alarm** if readings drop below or exceed limit values. The **wireless network** is used to establish a connection to mobile phones and even to the wireline network. He or she receives a direct **call** or a **text message (SMS)** that provides details about the **type of malfunction**.



Monitoring cleaning concentration

Optionally there is the possibility to equip the device with additional sensors for monitoring the cleaning additive concentration. In this case, you receive a corresponding alarm in the underflow of freely adjustable threshold values.

Alarm to your mobile phone

Convenient long-term access

Thealcona Milk Guard stores alarms, temperatures, and miscellaneous operating states for **up to 12 months**. The integrated **web server** is used to display these values via the Internet.

Archive via web server

This is accomplished by simply loading the Milk Guard website with an **Internet-compatible PC or Smart-Phone**. Communication with the unit is routed over the wireless network. As a result, **no additional LAN or WLAN connections** to the unit are needed.

Internet-enabled

online access anytime

adjustable limit values

convenient online archive

Types

ALC-TWU

Milk Guard for 1 tank

ALC-TWU-ET2

Milk Guard extension kit 2nd tank

ALC-TWU-D

Milk Guard for 3 tanks

ALC-TWU-ET4

Milk Guard extension kit 4th tank



Technical Specifications

Power supply:

100..240 V, 50/60 Hz

Current consumption:

0,2 A

Protection type:

IP54

Housing dimensions:

300 x 233 x 110 mm (WxHxD)

Ambient temperature:

0..35 °C

Control voltage:

12 V

General interfaces:

Horn

Mobile radio antenna

Interfaces for each tank:

Strobe "Load Warning"

Temperature sensor

Agitator sensor

3 digital signals for tank control

Monitoring cleaning concentration

Modem:

Dualband UMTS / Quadband GSM

Battery:

1,2 Ah (rechargeable)

Supplied scope:

GSM antenna with 5 m interface cable

Temperature sensor

Agitator sensor

Strobe "Load Warning"

Accessories:

5m antenna cable extensions

External horn



The alcona Milk Guard is available at your local installation contractor and/or your dairy farming dealer. We will gladly assist you with the selection of your local partner.

Dealer