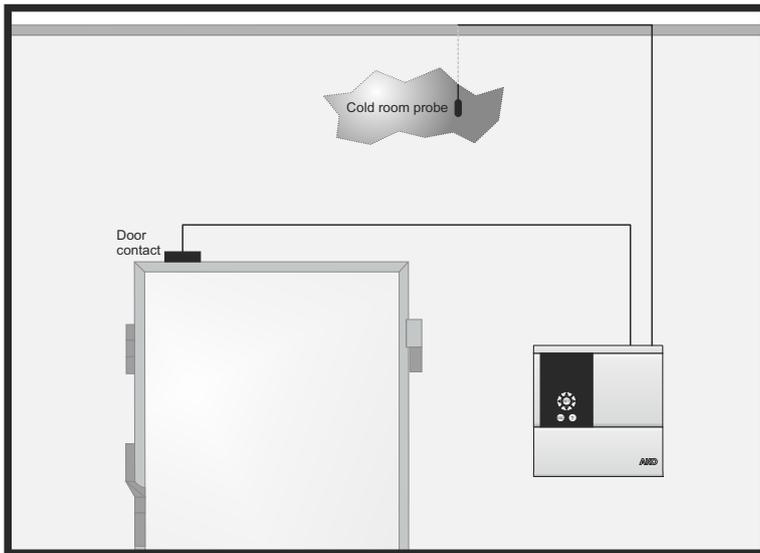# Event log function in CAMRegis data loggers

The new event log function records status changes in inputs configured as "digital input".

Recording installation variables, such as the opening and closing of the cold room door, changes of state in pressure switches, defrosting thermostats, thermal protection of the compressor, etc., can be very useful for analysing system health.

The example shown below describes the monitoring of a cold room door.

Application example: Recording the status of a cold room door

A cold room which is open too often may reduce the energy performance of the system, leading to possibly serious financial loss depending on the extent of the problem. It is therefore important to detect and solve it in good time.

As well as recording the temperature inside the room, the new CAMRegis data loggers can also record various other types of event such as the opening and closing of the door using the new event log function.
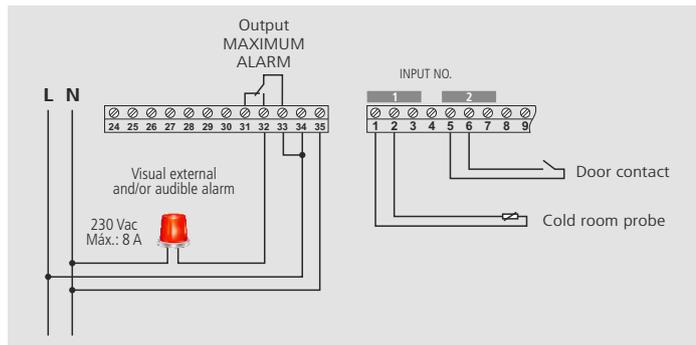
For each event, the event log includes the date, time and type of event (opening/closing).

In addition, to prevent the door inadvertently remaining open for long periods of time, you can also set an alarm (audible and/or relay output) to alert facility personnel.
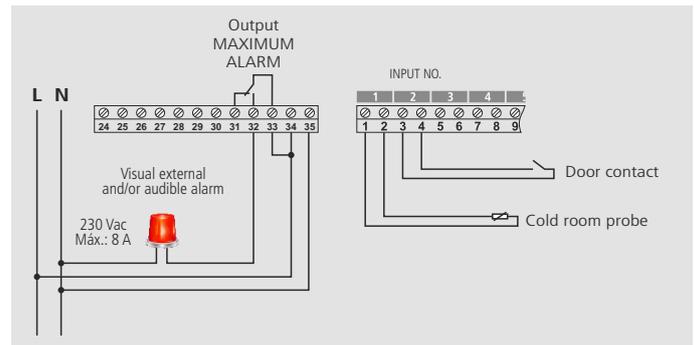
Wiring

The diagrams shown are only an application example. For more information, see the user manual at **www.ako.com**

AKO-1575x/1578x

AKO-1574x

Configuration of inputs

Configure Input 1 as required (probe installed, unit of measurement, alarms, etc.).

Configure Input 2 as shown:

Input type:	Digital
Description:	Door
Dig. input polarity:	Normally Open
Activation delay:	2 min .*
Deactivation delay:	0 min .*
Alarm relay:	Yes*
Alarm buzzer:	Yes*

*: Example values vary according to your requirements

Operation

- Every time you open the door of the cool room, the equipment will display the following message:

  `DOOR      On     ⌂X↑T`

- If the door stays open more than 2 minutes, the equipment will record an activation event (↑), the internal buzzer will sound and the external alarm (visual or audible) will be activated.
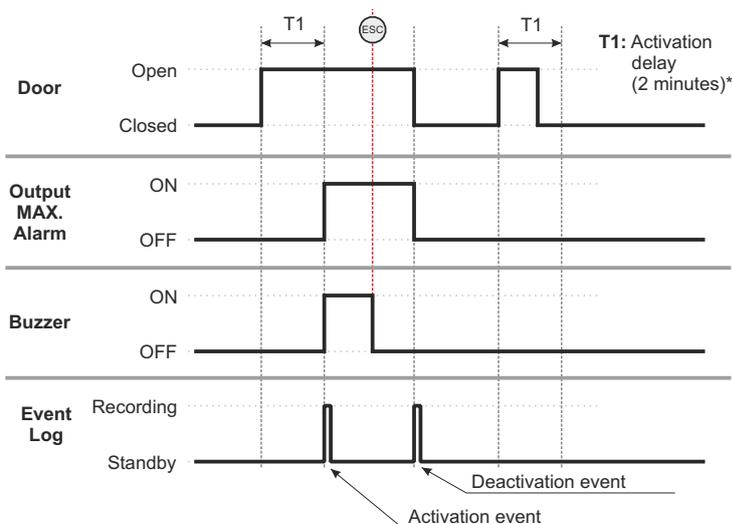
  `DOOR      On     ⌂•))↑`

- Pressing the ESC key will silence the buzzer, but the external alarm will remain active.

  `DOOR      On     ⌂X↑`

- When the door is closed, the equipment will record a deactivation event (↓) and the external alarm will be deactivated.

  `DOOR      Off`

- If the door is closed in less than 2 minutes, the equipment will not record an event or activate an alarm.

T1: Activation delay (2 minutes)*

Door — Open / Closed
Output MAX. Alarm — ON / OFF
Buzzer — ON / OFF
Event Log — Recording / Standby

Deactivation event
Activation event

Digital input log

Displays the event log stored in the equipment

This function displays a list of logged events. The first event will be shown in position 000, the second at 001 and so on up to the 1000 positions available for each digital input.

When they are all taken up, any new event generated will delete the first set of 256 positions and the event will be logged in the first position of this set.

Event No.
Event date

Type of event
Time of event

↑ Door opening
↓ Door closing

Example

Display door openings on 16/11/2010.

- Opened at 18:15 / Closed at 18:36 The door was open for 23 minutes (21+2 minutes delay).
- Opened at 22:47 / Closed at 22:55: The door was open for 10 minutes (10+2 minutes delay)

The door was opened 2 times and remained open for a total of 33.

```
Input 2
006-17/11/10 11:26 ↑
005-17/11/10 07:13 ↓
004-17/11/10 07:09 ↑
003-16/11/10 22:55 ↓
002-16/11/10 22:47 ↑
001-16/11/10 18:36 ↓
000-16/11/10 18:15 ↑
```

If the logger has a printer (**AKO-15742, 15752** and **15782**), you can print a list of selected events.

To select events for printing, scroll to the first one using the ▲ or ▼ keys, press **SET** and select more events using the ▲ key; the selected events will be marked with a **P**. Press 🖶 to start printing.

```
Input 2
006-17/11/10 11:26 ↑
005-17/11/10 07:13 ↓
004-17/11/10 07:09 ↑
003-16/11/10 22:55 ↓ P
002-16/11/10 22:47 ↑ P
001-16/11/10 18:36 ↓ P
000-16/11/10 18:15 ↑ P
```

Benefits

The event logging feature offers two key benefits for cold room management:

- **Alarm signal if the door remains open more than 2 minutes*:** Enables early detection if the door remains open for any reason.

- **Digital input log:** You can analyse in detail both the frequency of door opening and the time that it has remained open. This allows you to optimise access to the cold room, to extend the life of your system and reduce power consumption and therefore your bill.

*: Example values vary according to your requirements