

STEBalarm alarm system

STEBalarm alarm system for AEK Energie AG

- Combined alarm and process visualization system
- Web-based smartphone compatible and redundant solution
- Recording of all alarm event data
- Recording of energy meter data



The district heating center in Roggwil, one of the plants managed by the AEK Energie AG, which is integrated in the STEBalarm alarm system.

Available facilities

The AEK Energie AG is the leading energy supply company in the Jurasüdfuss region. The company, founded in 1894, manages a large range of different facilities that has been growing in the course of time and, among others, operates about 40 central heating plants at present. The gradual growth also reflects in the alarm systems - several different independent solutions existed. This variety and the cooperation with different suppliers caused unnecessary extra expenditure. Therefore, the AEK Energie AG was looking for a new, user-friendly and efficient solution to replace all other systems. A requirement was that the large number of available control systems had to be linked up reliably, for which interfaces with special programs had to be developed in some cases.

Requirement

- · Reliable alarm system for all plants
- Alarm server for alarm and on-call handling
- Recording of all meter data
- Status of the plants in a cockpit
- Operating data acquisition and data-log for visualization and export of the data

Implementation

The STEBalarm alarm system covers all requirements of the AEK Energie AG. The process visualization provides an overview of the plants and events in real time. Besides, as web-based solution, STEBalarm permits access to the plants at any time - including from the smartphone. The alarm is normally given from the head station in the AEK headquarters but each plant can also trigger an alarm independently, which ensures the required redundancy of the system. The integration of all available facilities was a real challenge; in some cases a solution was only possible on the hardware level. In the meantime, totally 30 plants have been integrated, and the emergency plans with the escalation stages are also included. Current status information is available and alarms can be managed by mouse-click. The uniform and user-friendly solution reduces the input of AEK Energie AG for processing the alarms. The new installation also integrates the energy meters; the latest meter counts can be retrieved at any.

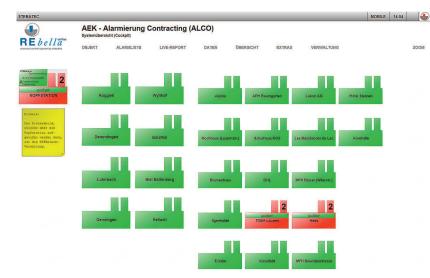


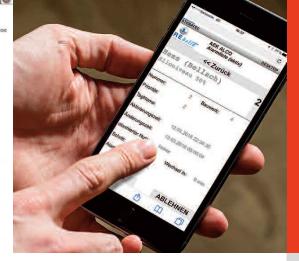
Access to all components and alarms is also possible from a smartphone.

The emergency plan can be displayed in different versions and permits real-time information of all states at any time.

| TEB | ATEC | | _ | | | _ | | | | | | MOBILE | 10:07 | |
|---|---------|--------------------------|---------------|---------------------|---------------|----------------|-------|---------------------|---------------------|-------------|----------|--------------------|------------|------------------|
| REbella process control system by stebatec | | Aktuelle Alarme | | | | | | | | | ALA | R | M | |
| | | stem by stebatec | OBJEKT | ALARMLISTE | E LIVE-REPORT | DATEN | | ÜBERSICHT | EXTRAS | VERMALTUNG | | | | ZCIDM |
| | | | Datenfilter | | | | | | | | | | | |
| nste | hende A | Alarme | | | | | | | | | | | | SV atenexport |
| Jmmer | Bauwerk | Bauwerksname | | Alarmtext | | TagName | Prio. | Aktivierungszeit | Anderungszeit | Alarmstatus | | alarmierter Nutzer | Wechsel in | Schritt |
| 1 | | FW Bellach | P1_US_Rom | erstrasse17(Schöni) | | Contraction of | 1 | 2016-03-14 09:48:28 | 2016-03-14 09:48:28 | QUITTIEREN | ABLEHNEN | | 17 min | 1 |
| 2 | 5 | FW Bellach | P1_US_Rom | erstrasse25(Dick) | | | 1 | 2016-03-14 09:48:28 | 2016-03-14 09:48:28 | QUITTIEREN | ABLEHNEN | | 17 min | 1 |
| | 5 | FW Bellach | P2_SA_Oelke | essel | | | 2 | 2016-03-14 09:46:03 | 2016-03-14 09:46:51 | QUITTIEREN | ABLEHNEN | | 15 min | 1 |
| | 9 | MFH Blaser (Gerlafingen) | Siloniveau 50 | 196 | | | 2 | 2016-03-14 07:52:02 | 2016-03-14 08:10:53 | quittient | ABLEHNEN | | 0 min | 0 |
| | 4 | Hess (Bellach) | Siloniveau 50 | 195 | | | 2 | 2016-03-12 22:34:30 | 2016-03-13 08:00:04 | quittiert | ABLEHNEN | keiner | 0 min | 0 |
| | 17 | FW Balsthal | P2_SA_Sons | tiges | | | 2 | 2016-03-12 15:56:55 | 2016-03-12 16:00:02 | quittiert | ABLEHNEN | | 0 min | 0 |
| | | | | | | | | | | | | | | |
| | | le Alarme (bis Werkz | altani | | | | | | | | | | | SV atenexpor |

The STEBalarm alarm system integrated in the REbella process control system now provides the long missed reliable overview of all alarms.





The system overview, called «Cockpit», displays all plants. Red color indicates an active alarm; a click Coming alarms can be acknowledged or rejected by a click and on the plant opens the related details.

are thus escalated immediately according to the on-call plan.

PROJECT REPORT

| STEBATEC | | | | | | | | | | MOBILE 14:10 | | |
|---|----|---------------|----------------------------------|------------|--|--------------------------|---------------------------------|----------------|------------|---|--|--|
| REbella process conditional agriculture statements | | | AEK - Alar Historische Alarme | | | | | | | | | |
| | | | OBJEKT | ALARMLISTE | LIVE-REPORT | DATEN | ÜBERSICHT | EXTRAS | VERWALTUNG | ZOOM | | |
| | | | Datenanforderung | Daten | filter | | | | | | | |
| Datenaufzeichnun | g. | | | | | | | | | C SV Datenexport | | |
| Zeitstempel | No | ummer Bauwerl | Bauwerksname | Status | | | | Text | | and the second se | | |
| 2016-03-07 12:50:04 | 1. | | Kopfstation | quittiert | Alarm quittiert: Kommunikation | asstörung mit Alpina (Bu | radoril | | | | | |
| 2016-03-07 12:48:07 | 1. | | Kopfstation | aktiv | Sende Email -> EMAIL SW (- | | | | | | | |
| 2016-03-07 12:48:07 | 14 | | Kopfstation | aktiv | | - () | | | | | | |
| 2016-03-07 12:47:21 | 14 | | Kopfstation | akty | neuer Alarm: Kommunikations | störung mit Alpina (Bun | nob | | | | | |
| 2016-03-07 12:18:45 | 14 | 4 0 | Kopfstation | quittiert | Statuswechsel AKTIV zu INAK | TIV -> wird gelöscht, da | guittiert: Kommunikationsstörun | g mit Alpina (| | | | |
| 2016-03-07 11:35:02 | 3 | 17 | FW Balsthal | quittient | Statuswechsel AKTIV zu INAK | | | | | | | |
| 2016-03-07 11:22:34 | 1 | 4 0 | Kopfstation | quittiert | Alarm guttiert: Kommunikationsstörung mit Alpina (Burgdorf) | | | | | | | |
| 2016-03-07 11:19:34 | 12 | 4 0 | Kopfstation | aktiv | Sende Email → EMAIL SW (| | | | | | | |
| 2016-03-07 11:19:34 | 1 | 4 0 | Kopistation | aktiv | Sende SMS -> | | | | | | | |
| 2016-03-07 11:18:40 | 1 | 4 0 | Kopfstation | akuv | neuer Alarm: Kommunikations | störung mit Alpina (Bur | (hobe | | | | | |
| 2016-03-07 10:47:23 | 34 | 4 0 | Kopfstation | quittiert | Statuśwechsel AKTIV zu INAKTIV -> wird gelöscht, da gulttert: Kommunikationselörung mit Alpina (| | | | | | | |
| 2016-03-07 10:31:20 | 24 | 4 0 | Kopistation | quittiert | Statuswechsel AKTIV zu INAKTIV -> wird gelöscht, da quittlert Kommunikationsstörung mit Blumenha | | | | | | | |
| 2016-03-07 08:23:07 | 14 | 4 0 | Kopfstation | quittient | Alarm guittiert: Kommunikation | | | | | | | |
| 2016-03-07 08:20:04 | - | 4 0 | Kopfstation | aktiv | Sende SMS -> - | | | | | | | |
| 2016-03-07 08:20:04 | 1. | 4 0 | Kopfstation | akuv | Sende Email -> EMAIL SW (- |) | | | | | | |
| 2016-03-07 08:19:33 | 14 | 4 0 | Kopfstation | aktiv | neuer Alarm: Kommunikations | | | | | | | |
| 2016-03-07 07:47:13 | 14 | 4 0 | Koptstation | quittiert | Statuswechsel AKTIV zu INAK | | | | | | | |
| 2016-03-07 07:05:38 | 2 | 4 0 | Kopfstation | quittient | Alarm quittiert: Kommunikation | nsstörung mit Blumenha | us | | | | | |
| 2016-03-07 07:04:33 | 15 | 5 0 | Kopistation | inaktiv | Alarm quittiert und entfernt: Ko | immunikationsstörung n | it Beundenstrasse (Lengnau) | | | | | |
| 2016-03-07 07:01:42 | 18 | 5 0 | Kopfstation | inaktiv | Sende SMS -> | - () | | | | | | |
| 2016-03-07 07:01:42 | 24 | 4 0 | Kopfstation | aktiv | Sende Email -> EMAIL SW (- | | | | | | | |
| 2016-03-07 07:01:42 | 18 | 5 0 | Koptstation | inaktiv | Sende Email -> EMAIL SW (- | | | | | | | |
| 2016-03-07 07:01:42 | 2. | 4 0 | Kopistation | aktiv | Sende SMS -> + | - () | | | | | | |
| 2016-03-07 06:53:19 | 24 | 4 0 | Kopfstation | aktiv | neuer Alarm: Kommunikations | störung mit Blumenhau | 8 | | | | | |
| 2016-03-07 02:41:17 | 13 | 5 0 | Kopistation | inaktiv | Statuswechsel AKTIV zu INAK | TIV: Kommunikationsst | irung mit Beundenstrasse (Leng | Inau) | | | | |
| 1 - 25/25 | | | | | | | | | | | | |

All alarm events are recorded and filed so that past events can be retrieved at any time.



Progress lines, in this case the temperature, display irregularities at a glance.