

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.

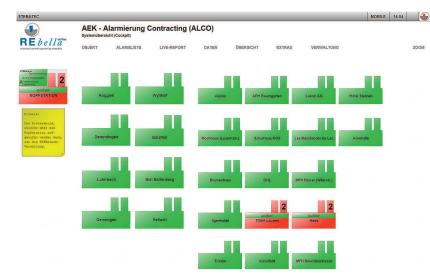


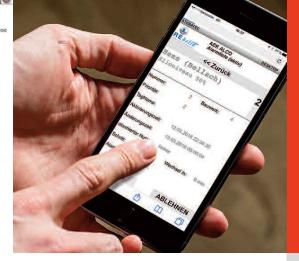
Access to all components and alarms is also possible from a smartphone.

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
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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
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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							
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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 (-							
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2016-03-07 12:47:21	14		Kopfstation	akty	neuer Alarm: Kommunikations	störung mit Alpina (Bun	nob					
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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.