



Midi Compact IQHeat

District heating substation with communication for medium buildings

Midi Compact-IQHeat is a district heating substation for the connection of apartment blocks and other medium buildings to district heating networks. IQHeat is our most advanced substation. It comes with integrated DDC and web solution.

Midi Compact-IQHeat reduces heating costs and flow charges for the property owner and gives lower return temperatures for network.

Midi Compact-IQHeat is manufactured and sold by Alfa Laval which has unique and world-leading expertise in the field of pre-fabricated district heating substations.

Complete and ready for operation upon delivery

Midi Compact-IQHeat comes ready for operation and complete with a DDC unit and web solution according to customer specifications.

The built-in simple Web solution can be used for easy connection to the internet. Basic software is installed and ready for operation. Communication and control takes place via the internet, ModBus or with a built-in operator panel.

Management, control and readings

IQHeat can be controlled and monitored using a standard PC with an internet connection or by an operator panel. With the Web200 option, all operating information is displayed graphically on the computer screen but is also stored as Excel files for cost accounting, statistics and more.

When connecting to existing property systems, IQHeat can communicate across different protocols, see Options. IQHeat always uses multiple sensors to ensure that troubleshooting and optimisation is possible remotely.





Date: 2014-09-24
Time: 16:13:32

IQHeat Web200

Home | Curve | History/Energy | Alarm | Settings

Alarm counter: 0

Reference sensors
Ref1: 23.7°C
Ref2: 21.3°C

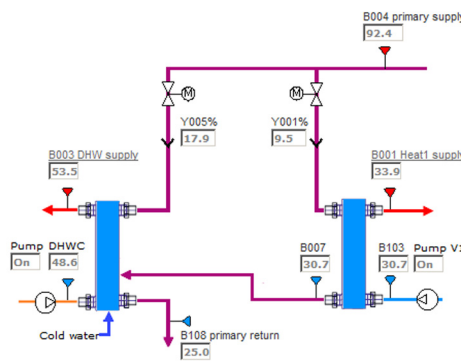
Flow chart

Common
Alarm counter: 0
B009 outT: 9.0 °C
B009 outT calc: 6.6 °C

Primary
B004 supply: 92.4 °C
B108 ret: 25.0 °C
ΔDelta: 67.4 °C

DHW
B003 supply: 53.5 °C
B032 DHWC: 48.6 °C
Y005 valve: 17.9 %

Heat1
B001 supply: 33.9 °C
B103 ret: 30.7 °C
B007 prim ret: 30.7 °C
Y001 valve: 9.5 %



MBus1 id:924732
T1: 92.4 T2: 25.0 ΔT: 67.4
Energy: 1,383.897 MWh
Capacity: 76.32 kW
Volume: 22,208.33 m³
Flow: 0.987 m³/h (0.27 l/s)

DHW
Mode: Normal
Setp: 55.0 °C
Cold water meter
Volume: 7721.3 m³

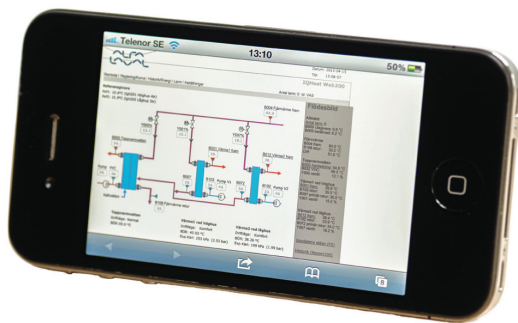
Heat1
Mode: Comfort
Setp: 33.75 °C
Return200: 0.0% Setp.
Optimal100: 0.0% Setp.

Home
History (Report100)
Heat1
Heat1 log
Hot water
Hot water log
Settings
Alarm list
Web HMI (display)

Flow Image via IQheat Web

In order to monitor and control one or more Midi Compact IQHeat district heating substations, no special equipment is required, just a standard web interface.

With IQWeb200 you download a flow image from IQHeat via the Internet to your computer screen or smart phone. If several substations are controlled from your computer, each substation has its own flow image. Here you get a quick overview of the district heating substation temperatures. If the values need to be adjusted, you do so on the following sides. This allows you to easily adjust, for example, for seasonal changes and to optimise operating costs.



Under the heading operation history, eight days of operation is displayed in the form of a curve chart. All operational history is continuously stored in XML files for Excel, and you can save up to 20 years of data. The operational history gives you transparent control of your adjustments and in so doing gives you both valuable feedback and statistics.

After the settings are made IQHeat automatically regulates flows and temperatures without any special supervision or control. The system has alarm functions for many parameters, such as overheating and scalding risk, operation of pumps and pressure in expansion vessels. Alarms can be sent as e-mails or SMS, see options.

Weather forecast control, eGain forecasting™

IQHeat is prepared for direct communication with weather forecast services from eGain. With an IQHeat the communication of weather forecast for a building is done by WEB directly to eGain's servers holding data for each building. No extra hardware is needed, the IQWeb200 manage all communication.

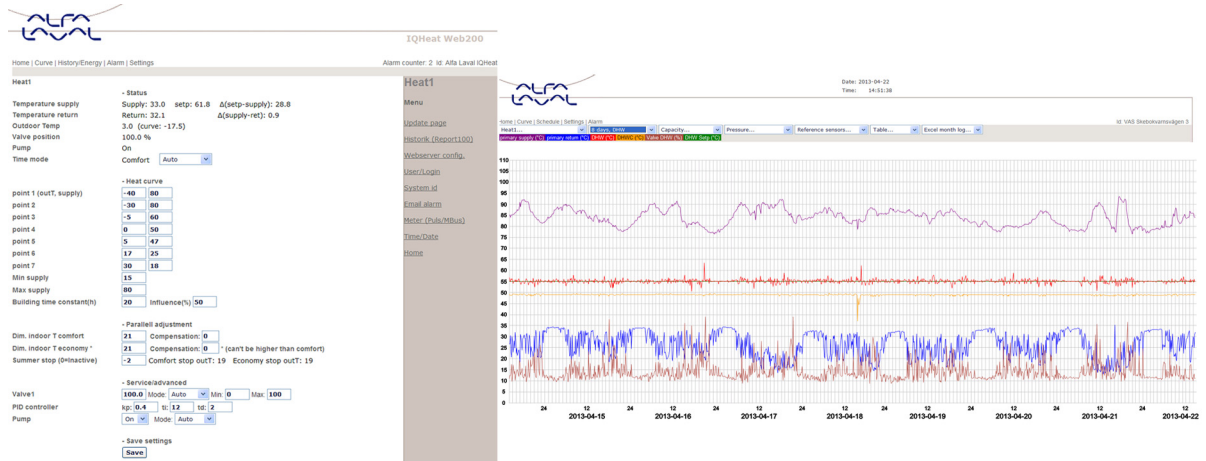
Visit <http://egain.se/en-gb/> for more information of this unique weather forecasting, and its possibilities.



The major advantages with Midi Compact IQHeat is that the 2-step connected standardized substation, in four sizes, has a very small foot-print, short delivery time and several options for integrated primary circuits. It has been developed and configured to meet the optimum performance for heating and DHW. Low return temperature together with the energy saving functions makes Midi Compact IQHeat the very best choice in this range, with proven energy savings up to 15%. Midi Compact IQHeat is wired and tested from the factory, this provides optimum performance and also clear guarantee undertakings, all from one single supplier.

Midi Compact-IQHeat is design for one heating circuit and one hot water circuit, with integrated DDC control and ready to run default settings. Fully prepared for quick and easy installation.

Please contact Alfa Laval if you are interested of a quote or more information.



Heating settings and history via IQHeat Web

Basic version

An operator panel is included as standard, along with communications with ModBus, a simple Web solution with the same information as the operator panel.



Monitoring with choice

IQHeat comes with optional communications solution. Changeable also after installation by replacement or adding of communication modules.

- IQHeat Web200, web solution and a PC with Internet access is an effective solution for controlling and managing one or more Midi Compact IQHeat units. Complete with flow images.
- IQHeat, connection to existing building management system, BMS. If a property system is already in place with familiar functions and interfaces, IQHeat communicates via OPC, Modbus, LON or BacNet. This means that the plant is controlled locally by IQHeat during the construction period. When the external, master system is then connected, IQHeat will be controlled by the sent parameters.
- IQMeter200 provides the option of reading the heat meter values via Mbus. The functions such as capacity control in Web200 can then be activated to optimise operating costs.

Options

- IQAlarm. SMS alerts via Modem

Alfa Laval continuously works on improving existing functions in IQHeat, as well as developing new.

New versions of IQHeat applications can be downloaded through internet, for units that need update, or upgrading

How to contact Alfa Laval

Up-to-date AlfaLaval contact details for all countries are always available on our website on www.alfalaval.com