

BH8-CTRLX-230

Programmable smart-house controller

Option for external GSM Modem for monitoring and control via SMS

User-friendly configuration via Windows XP/Vista software

Ethernet, USB port and SD-card for configuration and smart-house data read/write

Full featured smart-house operations: light function, Rollerblind, Alarm etc.

RS232 connection for external device connection/gateways

H8-housing for DIN-rail mounting (EN50022)

AC or DC power supplied (battery backup)



INPUT/OUTPUT SPECIFICATIONS

Serial Port		RS 232
COM 1		9600 Baud - 115 kBaud, adjustable
Pin assignment	TxD	Pin 12
	RxD	Pin 13
	GND	Pin 14
Dielectric voltage		
Com.port - smart-house		≥ 2 kVAC (rms)
USB		Client interface
Ethernet		10/100 MB RJ45
smart-house Output		smart-house bus
Output voltage		8.2 V
Current (absolute max. ratings)		< 450 mA @ 25°C
		< 300 mA @ 50°C
Short-circuit protection		Yes
Sequence time		
32 in- and outputs		38.6 ms
128 in- and outputs		132.3 ms

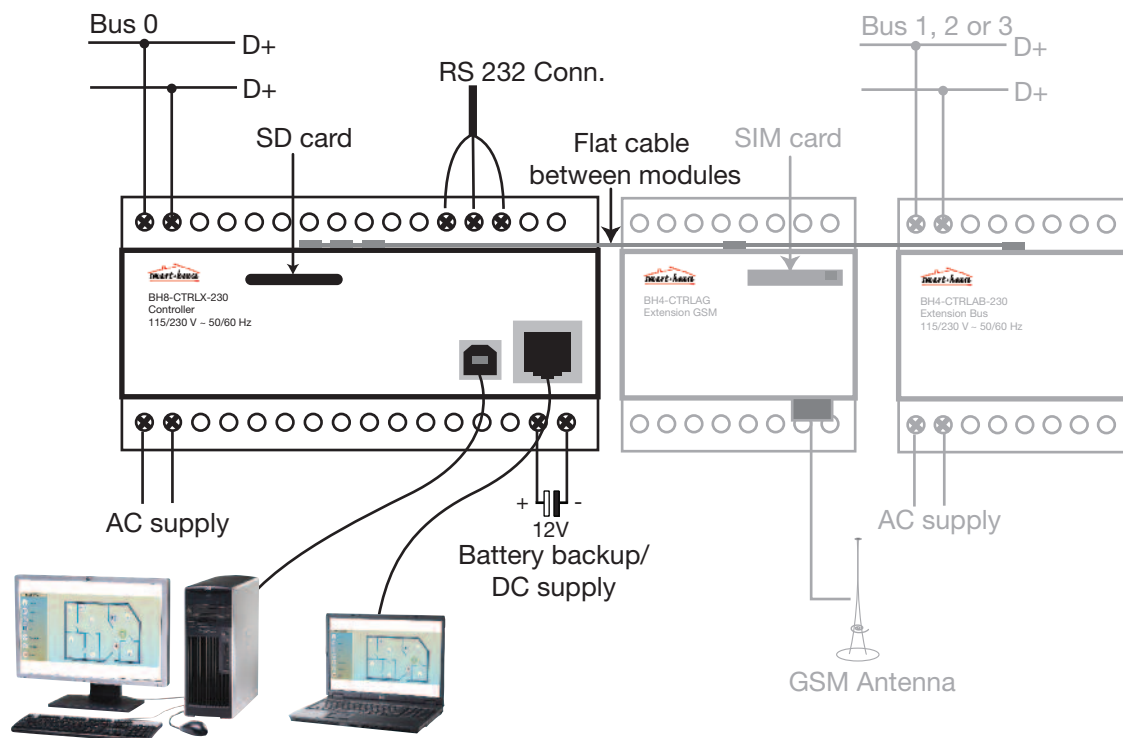
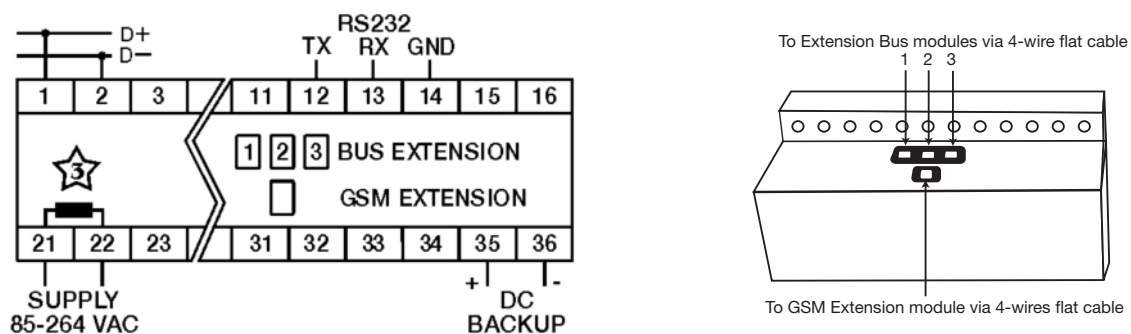
SUPPLY SPECIFICATIONS

Power supply		AC-Drive	Overvoltage cat. III (IEC 60664)
Rated operational voltage			85-264 VAC (IEC 60038)
through term. 21 & 22			47 to 63 Hz
Frequency			Typ. 20 VA at max load
Rated operational power			≤ 12 W
Power dissipation			
Rated impulse withstand			
voltage		230 V	4 kV
		115 V	2.5 kV
Dielectric voltage			
Supply - smart-house bus			≥ 3 kVAC (rms)
DC in smart-house bus			None
Com. ports - smart-house bus			≥ 3 kVAC (rms)
Supply - Com. ports			≥ 3 kVAC (rms)
DC charge			
U out through term. +35 & -36			13.7V ± 0.1V
Max. charge current (short)			300 mA
Charge current @ 12V DC			app. 40 mA
Power supply		DC-Drive	Overvoltage cat. III (IEC 60664)
Rated operational voltage			13 VDC ± 10%
through term. +35 & -36			Yes
Reverse polarity protection			10 W
Rated operational power			≤ 7 W
Power dissipation			

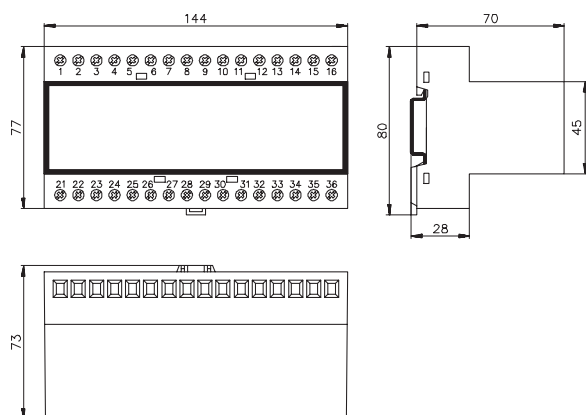
GENERAL SPECIFICATIONS

Real-time clock			
Accuracy		Better than ± 1 minute/month	
Internal back-up time		Typ. 48 hours	
Power ON delay		< 30 s	
Indication for			
Supply ON		LED, green	
ON Line		LED, yellow	
Battery drive		LED, yellow	
COM status		LED, red	
Ethernet collision		LED, yellow	
Ethernet link		LED, green	
Environment			
Degree of protection		IP 20	
Pollution degree		3 (IEC 60664)	
Operating temperature		0° to +50°C (+32° to +122°F)	
Storage temperature		-20° to +85°C (-4° to +185°F)	
Humidity (non-condensing)		20 to 80% RH	
Mechanical resistance			
Shock		15 G (11 ms)	
Vibration		2 G (6 to 55 Hz)	
Dimensions Material			
(see "Technical Information")		H8-housing	
Weight		400 g	

WIRING DIAGRAM



DIMENSIONS (mm)



MODE OF OPERATION

Intelligent functions

The smart-house controller is a programmable integrated unit specially designed for building automation applications. The controller includes dedicated functions for light control, temperature control, roller blind control and alarm monitoring. And it includes smart functions like sequence control which enables a series of actions to be performed automatically, and simulated occupation to control the lights and roller blinds while the owner is away, based upon the real life behaviour of the inhabitants.

Smart-house Controller Configuration

The smart-house controller is as default configured without intelligent input and output function to run modules on the smart-house bus. In order to setup the intelligent functions the controller has to be configured by the Windows based smart-house Configuration tool. This software is free and delivered on a CD-rom together with the controller.

The smart-house Configuration tool operates on Windows® XP / Vista PC's. The smart-house

Configuration tool enforces a full documentation of the smart-house installation. This tool is used to create a logic overview of the building, and in each room you may place the smart-house IO modules necessary for the wanted functions. To simplify this operation, the smart-house Configuration tool includes a database of all the smart-house products. Finally, the functions in each room are configured, using the input/output modules installed.

A configuration can be transferred to/from the controller either through the USB/Ethernet or by a standard SD-memory card.

Power LED

The green power LED will be on, when the module is connected to power.

In case of a bus short the green LED will indicate it in one of two ways:

1. The light intensity will go weak in app. 30 sek.
2. The LED and the yellow bus LED will be flashing.

Bus LED

At power on the yellow Bus led will be constant on right away. 8 VDC will be on the bus for charging up bus-supplied modules. After power on delay the led will be interrupted in each bus period resulting in weak flashing in the constant light. The more outputs activated on the bus, the more the led is flashing.

GSM Extension Module Option BH4-CTRLAG

The smart-house Controller can be connected to a GSM extension module which enables monitoring and control of smart-house signals via SMS messages to/from mobile GSM telephones.

There are 3 different ways to use SMS messaging:

- The smart-house Controller can be programmed to send out event-based SMS messages. The event can be a channel switching ON or OFF, or it can be an analog signal crossing a set-point.
- Requests for status of digital or analog data can be sent and answered via SMS messages
- Status of digital channels can be controlled by sending commands

via SMS messages

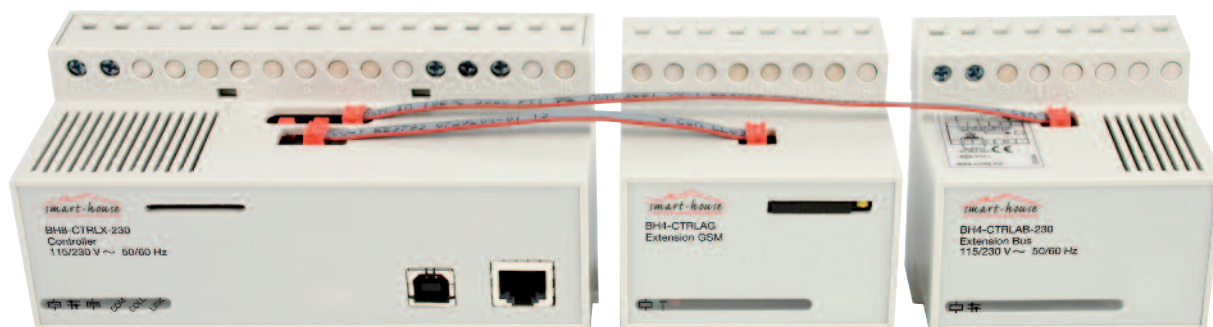
In order to make use of the GSM module, the following is required:

- A SIM-card with the pin-code 9090 needs to be inserted into the slot in the front of BH4-CTRLAG. The SIM-card must be a 3V type.
- A GSM antenna needs to be connected to the FME connector on BH4-CTRLAG. If the unit is installed in a metal enclosure, the antenna must be installed outside the enclosure.

Bus extension module option BH4-CTRLAB-230

The smart-house controller can be connected with up to 3 bus extension modules, which each represent a smart-house net enabling 4 x 128 smart-house net enabling 4 x 128 inputs and 4 x 128 outputs.

The Controller is named BUS 0, and the Extension bus modules BUS 1, 2 and 3. The BUS names are used during configuration of the smart-house controller.



TYPE SELECTION

Supply

115/230 VAC / 12 VDC

Ordering no.

BH8-CTRLX-230

ACCESSORIES

External bus module
External GSM module

BH4-CTRLAB-230
BH4-CTRLAG

SCOPE OF SUPPLY

1 x smart-house Controller
1 x USB
1 x CD-rom

BH8-CTRLX-230
Type B
SW BH8-CTRLX-230