

Technical User's Guide

AC 208 Alarm System

Code No. 99-97-1789

Edition: 10/2010 GB

EC - Declaration of Incorporation

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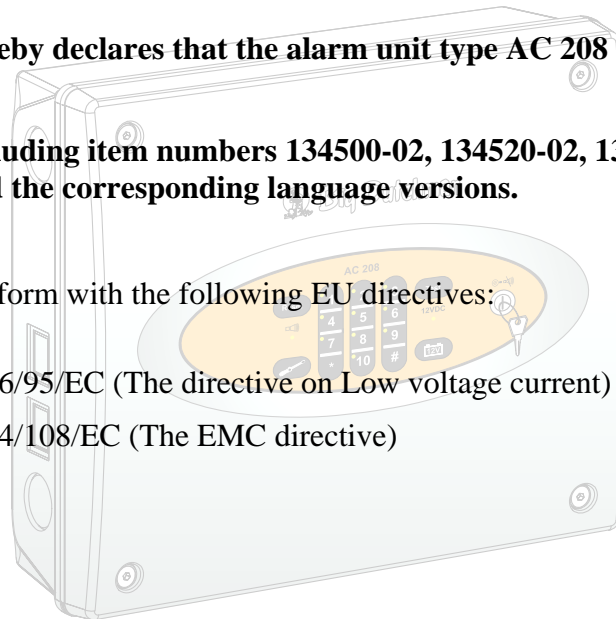
hereby declares that the alarm unit type AC 208

**including item numbers 134500-02, 134520-02, 134540-02 and 134660-02
and the corresponding language versions.**

conform with the following EU directives:

2006/95/EC (The directive on Low voltage current)

2004/108/EC (The EMC directive)



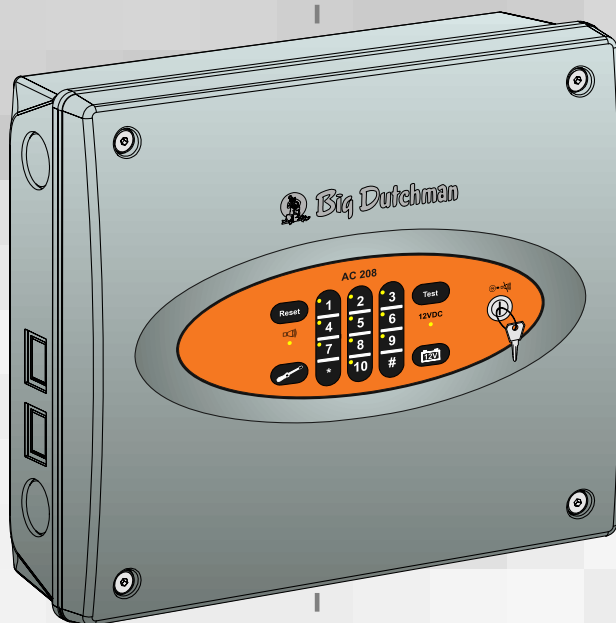
Location: Hedelund 4, DK-7870 Roslev

Date: 20.08.2010

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AC 208 Alarm System Technical User's Guide



99-97-1789
10/2010 GB



Program Version

The product described in this manual holds software. This manual corresponds to:

- Software versions: Front: 1.15, Fixed line: 3.18 and GSM: 1.19

It was released in 2010.

Product and Documentation Changes

Big Dutchman reserve the right to change this document and the product herein described without further notice. In case of doubt, please contact Big Dutchman.

Latest date of change appears from the back page.



In case of misoperation or improper use, ventilation systems can result in production loss or cause loss of lives among animals.

Big Dutchman recommend that ventilation systems should be mounted, operated and serviced only by trained staff and that a separate emergency opening unit and an alarm system be installed as well as maintained and tested at regular intervals, according to Big Dutchman's terms and conditions of sale and delivery.



Pre-paid mobile service cards may not be used with AC 208 GSM.

NOTE

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1 Product Description

The AC 208 alarm system is intended for monitoring of housing equipment and computers and can monitor up to ten thermostats or alarm relay outputs from, e.g. silos, burners and feeding systems. AC 208 Fixed-line network and AC 208 GSM also contain a speech computer which can be used for clear speech alarm calls.

2 User's Guide

2.1 Operating Panel



Acknowledge alarms.



Test the siren and flashing alarms.

Press the key for 5 seconds to activate test calls.



Press: Start or end a service break.

Press the key for 2 seconds to be able to use the keyboard as an ordinary phone.



Press: Hear the current voltage on the battery.

Press the key for two seconds to set the time for the daily battery test.

Numeric keyboard 1-10

- connect and disconnect the monitoring of inputs 1-10.
- enter phone numbers.
- set the speech computer.

Key breaker

The alarm system integrates a key breaker which is used to limit operation access of the system. When the system is locked, you can stop the siren. Stopping flashing alarms and telephone calls requires an unlocked system.



Generally, this user's guide implies that the alarm system has been unlocked with the key.

See section 2.5 for functions with locked key breaker.

Lamps	Green		Red		Turned off
	Constant	Flashes	Constant	Flashes	
Alarm lamp	State OK	System in service mode	Alarm acknowledged	Alarm	
12VDC-lamp	230 V operation	Battery test is running	230 V missing	Battery test fails	
Lamps for input terminals 1-10	State OK	-	Alarm acknowledged	Alarm	Monitoring stopped

2.2 Alarm

2.2.1 Stop Alarm via Operating Panel

- Press  (Reset)
- Read the cause of the alarm (see section 2.2.1.1)
- Remedy the cause of the alarm
- Press  (Reset) again to restart monitoring

2.2.1.1 Alarm causes

	Alarm lamp	Input lamps	12 V DC lamp
Input alarm	Flashes red	Flashes red	
Battery error	Flashes red		Flashes red
230 V lacks	Flashes red		Constant red

2.2.2 Stop Alarm via Telephone

- The speech computer calls and says: “Alarm from speech computer”
- Press # (acknowledges the alarm)
- The speech computer mentions the alarms in question

2.2.2.1 Redial until Acknowledgement at the Unit

AC 208 includes the function Redial. When this function is active, AC 208 redials after the set period of time until acknowledgement is carried out at the actual alarm unit as described above in section 2.2. When redialling, the call process starts all over again as if it were a new alarm.










The period of time between the the calls can be set from 0-30 minutes. At 0 minutes the function is inactive. Also see the section 2.4.7.

2.2.3 Stop Alarm via SMS (GSM only)

If the voice computer is set up to SMS alarm, an SMS is sent to the first telephone number activated for SMS alarm. Also see paragraph 2.4.3.2.

- Answer the SMS alarm and send AC 208’s password ending with a point; e.g. '1.' (1 is the factory-set password).
- AC 208 will acknowledge the alarm and send an SMS text to all phone numbers indicating that the alarm has been acknowledged, the alarm type and the phone no. that acknowledged.

2.3 Description of Keyboard

-  **Reset** This key is used to acknowledge system alarms. Acknowledged alarms are indicated by the lamp changing from flashing red light to constant red light. If, in the meantime, the input starts working again, the lamp will change to constant green when acknowledging by pressing the  key.
- The speech computer mentions the alarms in the system.
-  This key is used together with the speech computer to set the system to a service break. No alarm will be given for the next 60 minutes after which the service break automatically ends. The service break can be stopped by pressing the  key.
- In service break mode, the alarm lamp will flash green while the lamps for the inputs **1-10** will display the current state of the inputs.
- In case of system alarms, an alarm will be triggered when the service break ends. Alarms occurring before the service break will also be triggered.
- Press the key for 2 seconds to be able to use the keyboard as an ordinary phone. All phone commands can be used. Press 000# to cancel operation.
- AC 208 automatically prevents operation of the system after 40 seconds of inactivity.
-  **Test** This key is used to test the alarm outputs. As long as the  key is pressed, all alarm outputs on AC 208 will be activated (Alarm relay, Flash and Call outputs).
- Press the  key for 5 seconds to activate test calls.
-  **12V** This key is used to set a daily time for the battery test. When setting the time for the battery test, press the  key for approx. two seconds until the **12 V DC** lamp starts flashing green. The battery test will then be carried out every day at the time set for the function.
- The daily test lasts for ten minutes. If the battery voltage drops below 11.5 V, an alarm is triggered for “battery error”, the **12 V DC** lamp flashes red, and the battery should be replaced immediately. Since the test is carried out every day, the alarm will be triggered daily until the battery is replaced.
- Press the key briefly to hear the current voltage on the battery. However, this applies only to AC 208 Fixed-line network and AC 208 GSM.
- 1-10, * and #** The keys **1-10** are used to start and stop the monitoring of the ten inputs.
- The keys are used with the ***** and **#** keys to enter phone numbers and other speech computer settings. When ***** is pressed, the lamps for the inputs 1 to 10 are turned off to indicate that the setting of the speech computer is in progress. The system automatically returns to normal after ten seconds if no entries are made or the **#** key is pressed.

2.4 Speech Computer

The Fixed-line network and GSM variants contain a speech computer which is also used to monitor alarms from all the connected panels. The speech computer has a vocabulary of approx. 200 words used to speak alarms, etc. in both the local loudspeaker and via the telephone.

2.4.1 Scanning Stations

It is important to scan the stations when carrying out the setup. In connection with setup or when changing the number of control panels, the voice computer must search for the connected stations. The AC 208 includes 11 stations divided among 10 input terminals and one system station.

Hold the **#** key for 2 sec.

After approx. 2 min. the voice computer states the found stations. Please check that this is correct.

2.4.2 Telephone Numbers

Telephone numbers must be entered before alarm calls can be made. A total of five telephone numbers of max. 18 digits each can be entered. When a number has been entered, the speech computer will speak it over the loudspeaker.

Entering a telephone number 1-5	Check	Delete
*1 <telephone number> #	*1#	*1*#
*2 <telephone number> #	*2#	*2*#
*3 <telephone number> #	*3#	*3*#
*4 <telephone number> #	*4#	*4*#
*5 <telephone number> #	*5#	*5*#

2.4.3 SMS Alarm

AC 208 can transmit an SMS alarm indicating alarm type.

Activate the SMS alarm function by pressing * after the phone number.

Example Press ***1** <phone number> *#

2.4.3.1 Time between SMS Alarm

If SMS alarm is activated on more telephone numbers, the time between the single SMS texts are sent can be changed. 0 minutes is the factory-set.

Time between SMS alarm Press ***64** <0-5> #

2.4.3.2 Acknowledgement of SMS alarm

Answer the SMS alarm and send AC 208's password ending with a point; e.g. '1.' (1 is the factory-set password).

AC 208 will acknowledge the alarm and send an SMS text to all phone numbers indicating that the alarm has been acknowledged, the alarm type and the phone no. that acknowledged.

2.4.4 Setting of Dial-up Functions

Setting	Command	Factory setting	Description
Delay	Press *62 <1-20 min.> #	5 minutes	Delay from occurrence of alarm until the call starts.
Answer call after	Press *92 <1-10 rings> #	3 rings	Number of rings before the speech computer answers the call.
Call to same no.	Press *95 <1-10 calls> #	3 calls	Number of calls to the same number before proceeding to the next number on the list.
Different persons on duty	Press *97 <nos.1-5> #	No. 1	Calls start at telephone numbers 1-5.

2.4.5 Input Names

It is possible to change the names of inputs. Up to three words can be used for each input. Use the “Input names” chart to indicate the setup. Use the following entry procedure:

Press *** 86** <station number> * <word> * <word> * <word> #

See the table to the right for our suggestions for names.

A couple of examples:

- Name input 1: Porker house 12
- Press ***86 1* 402* 410* 12#**
- Name input 5: Feeding system
- Press ***86 5* 281* 249#**
- Name inputs 7 and 8: Silo 1 and 2

As silo is not included in the list of words, record it.

Select word 73. Call the speech computer, enter the access code and record word number 73 (see section 2.4.6):

Press ***73 0** <record the word “Silo”> #

See section 2.4.6.

The new word will now be used as the name for inputs 7 and 8:

Press ***86 7* 73* 99 #**

Press ***86 8* 73* 2 #**

Name suggestions:	Word numbers
Cooling	192
Controlled_environment unit	405, 411
Gestation unit	403, 411
Exchanger	179
Farrowing house	401, 410
Feeding system	281, 249
Heating	104
Heating system	104, 249
House	410
Inlet	157
Input	48
Level	194
Mating house	404, 410
Outlet	159
Porker house	402, 410
Power failure	143, 258
Prefinishing	406
Pump	195
Room	43
Ventilation_rate	103
Water	193
Weaner unit	408, 411
Weaner_to_finishing house	409, 410
Young_female unit	407, 411
Word 73	73
Word 74	74
Word 75	75
Word 76	76
Word 77	77
Word 78	78
Word 79	79
Various figures (1..20)	99, 2, 3, 4, 5...20

NB Word 1 is pronounced as “one” while word 99 is pronounced as “one” with a different stress.

NB Also see complete glossary for changing name of input terminal, paragraph 9.

In order to have user words displayed in SMS messages, you have to send an SMS reading ***73<user word> #**. It is done the same way for other user words.

2.4.6 Call the Speech Computer – Recording User Words

You can record only by calling the speech computer. When the speech computer answers the call, it says:

- “Welcome to” “speech computer”

Then enter the access code and end using **#**. The factory-set code is 1. The line is automatically disconnected after 40 secs. without any activity. After 30 secs., “awaits command” sounds. Press **#** to hold the line. Enter **000 #** to hang up at once.

Function	Command	Description
Welcome	Press *71 0 <“Welcome to”> # -press 0 to start and # to stop	Replaces the factory-set “Welcome to” recording used when calling AC 208
Name	Press *72 0 <name> # -press 0 to start and # to stop	Replaces the factory-set “Speech computer” recording used both for outgoing alarm calls and calls to AC 208.
User word	Press *73-79 <User word> # -press 0 to start and # to stop	User words 73-79 in the word list can be used to name inputs.


NB The recording period is max. 12 secs., including the user-recorded “welcome to” and the name. Each word can last max. eight secs.

The **name** recorded is used in connection with alarm calls. Here, the speech computer says: “Alarm from” + **name**.

In order to have name displayed in SMS messages, you have to send an SMS reading ***72<name> #**.

2.4.7 Enquiry and remote Control

All units/control panels in the network are accessible. For remote control and enquiries, you can make use of phone, SMS or AC 208 keypad.

Press  for 2 sec. on the AC 208 before making the entry. It says: "Enter command".

Function	Command	Description
Enquiry	Station no. * Register no. # Example: 100 * 3 #	Listen to the value in a register on a specific station. Responds with a horn alarm time for station 100 (System).
	100 * 12 #	Responds with the battery voltage.
Remote setting	Station no. * Register no. * Value # Example: 100*4*5#	Changes the content of a register on a specific station. Changes the approval time to 5 seconds. This is the time that passes from the occurrence of an alarm until it is accepted as an alarm. The factory setting is 30 sec.
	100 * 8 * 10 #	Changes the delay time from the alarm occurs to the CALL output activates to ten minutes.
	100 * 29 * 2359 #	Sets the clock to 11.59 p.m.
Redial	100 *47* <30> #	Redialling after 30 minutes, after acknowledgement on the phone. Redialling does not stop until acknowledgement has been carried out on the control unit. The factory setting 0 minutes = switched off.
Alarm status	Station no. * # Example: 1 * #	Enquires about the alarm status for a specific station. Responds with the alarm status for station 1 (Input 1).
Start/Stop monitoring	Station no. * 0 # Example: 1 * 0 #	Changes the monitoring state on a station. Starts the alarm monitoring function on station 1 if it has stopped, or stops it if it is activated.
Active alarms	99 * #	Enquires about active alarms in the entire system. Responds with the number of current alarms, followed by cause / type and station name. In this way, non-acknowledged alarms, if any, are also acknowledged.
History	99 * * #	Goes to historic mode. "Alarm memory mode" sounds.
	#	Mentions the most recent alarm and how long it is since it occurred. Press # again to listen to older alarms.
	* #	Returns to normal mode.
	000 #	Disconnects the line to the speech computer.

2.4.8 Other Speech Computer Setting Options via Telephone

Function	Command	Factory setting	Description
Access code	*91 <code> #	1	The new access code is spoken. It is not possible to delete or hear the code again.
Alarm word number	*96<word>#		Every ten seconds, the word is spoken (the sound) in case of an alarm.
	Ex. *96 201 #		- Siren sound
	Ex. *96 112 #		- "Alarm"
	Ex. *96 79 #		- Word 79 (to be recorded by the user)
	*96 * #	Disconnected	- Disconnects the function.
Alarm speech	*98 <0/1> #	1 (Activated)	In case of system alarms, and if this function is set to 1, they will be spoken every minute.

2.4.9 Interaction with Fax or Modem

It is absolutely advisable to connect AC 208 to its own separate telephone line to ensure optimum use. However, AC 208 has a function that allows it to interact with a fax and a modem.

Set the speech computer to answer the call before the fax/modem. Call AC 208 and hang up without dialling. For the next minute AC 208 will answer the call after three additional rings and in practise let the fax/modem take over.

2.4.10 Error Messages from the Speech Computer (in Loudspeaker)

It says ...	Meaning
"Missing stations"	Telephone numbers HAVE BEEN entered but scanning of stations has NOT been carried out. (Press the # key for two secs.).
"Faulty telephone line"	<p>Line voltage alarm or dialling tone alarm</p> <ul style="list-style-type: none"> The monitoring function is active only when a telephone number has been entered. The telephone line is tested by measuring the voltage which is approx. 48 V DC in quiescent mode. If the voltage drops below approx. 5 V, an alarm will be triggered. Check that the telephones on this line are working. If dialling tone monitoring is activated, the test is carried out by the speech computer answering the call every two hours, listening for the dialling tone. If there is no tone, the test will be carried out again every ten minutes for two hours after which the message "Telephone line error" will be given. <p>Install a separate telephone line if a high degree of safety is vital. This will also make it easier to call the speech computer.</p> <p>If this error cannot be avoided, install a dialling tone monitoring function and disconnect the line voltage monitoring function.</p> <ul style="list-style-type: none"> Press *995*# Disconnection of line voltage monitoring. (*995 1# activates the function) Press *989 1# Activation of dialling tone monitoring. (*989*# disconnects the function)
"No dial tone"	When an attempt is made to dial up and the external telephone line does not provide a dialling tone. Five additional attempts are made at ten sec. intervals. After a break of 144 secs., the above procedure is repeated until the line provides a dialling tone again.
"Station x register y does not answer"	Enquiry about station / register which is not present or does not answer. (x * y # has been dialled)
"Out of memory – please erase word and try again"	The RAM memory has room for no more recordings. A recording has to be deleted before a new one can be entered. Press * 73 * # deletes word 73
AC 208 GSM	
"No communication with the telephone unit" or "The communication with the telephone unit not valid"	Defective hardware or GSM module. Defects may result from shield/armouring not being connected to terminal 16/GND.
"Please enter 1 2 3 4 on the SIM card"	The PIN code of the SIM card is not 1234.
"The SIM card is missing"	A SIM card is missing in the AC 208 GSM module.
"The SIM card is not active, please enter the PUK code and 1 2 3 4 on the SIM card"	Enter the PUK code and PIN code = 1234.

2.5 Key Breaker - locked Alarm System



The alarm system integrates a key breaker by means of which you can limit operation access of the system.

The alarm system is locked when the key is in vertical position. In this position the key can be removed.

When the system is locked, it is possible to carry out the following:

- Press the **Reset** key to stop the siren.
Flashing alarms and telephone calls continue until they are acknowledged on the unlocked alarm system
- Press **Test** to hear the program version of the front panel, test the alarm outputs, the siren and the flashing alarm.
- Press **12V** to hear the current battery voltage.

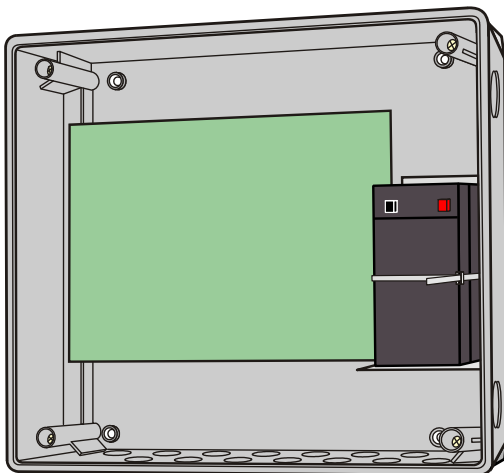
All the other keys are inoperative. It is, for example, not possible to start and stop the alarm monitoring of input terminals or apply service break.

2.5.1 Remote Control of locked Alarm System

It is possible to remote-control a locked alarm system in the following ways:

- From another control panel (unlocked).
- Over the phone (requires password, see section 2.4.8).
- By SMS (however, only from encoded telephones - that is to say, the numbers the alarm system calls, see section 2.4.3).

3 Mounting Guide

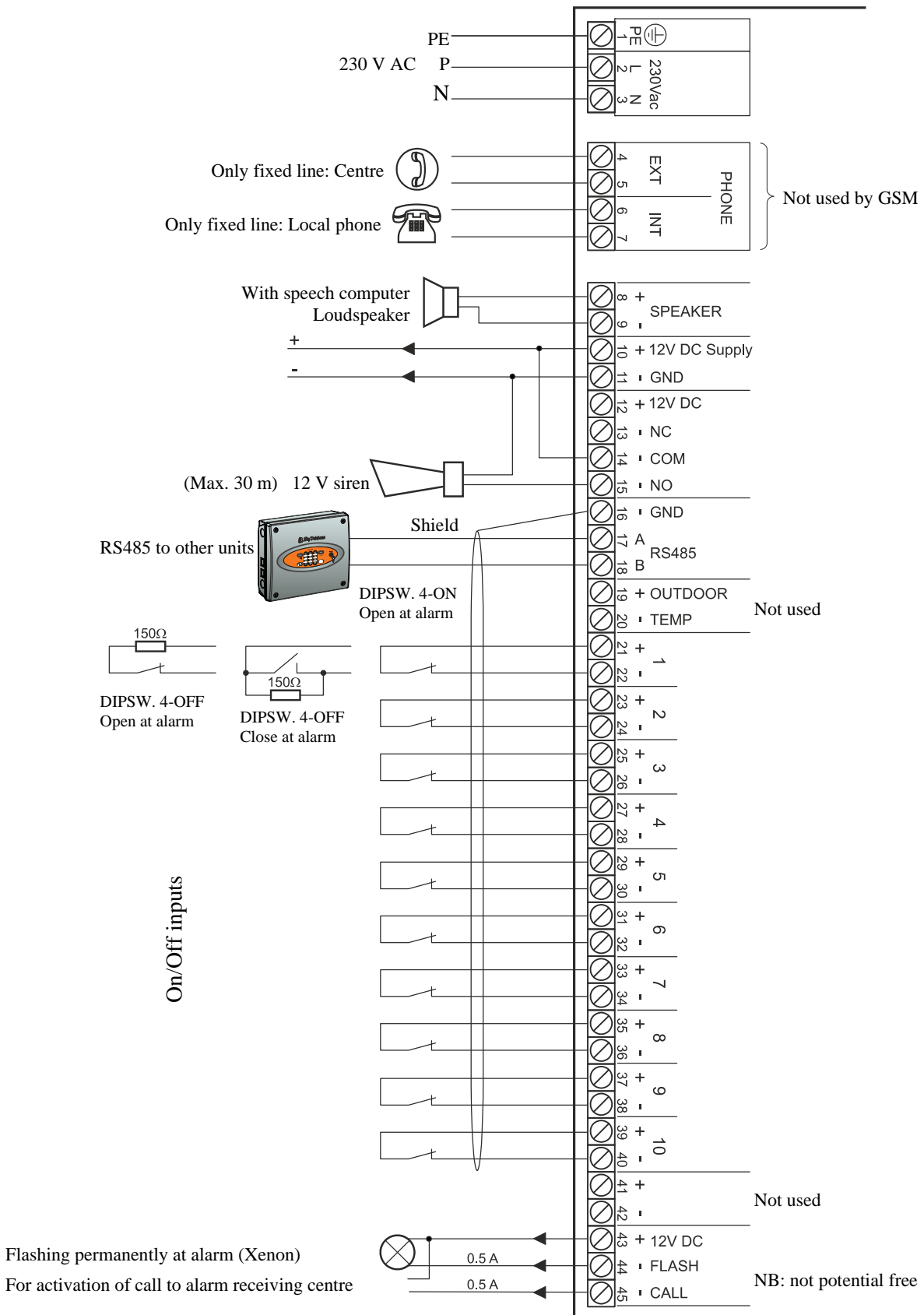


- 1) Place the battery on the battery ledge to the right inside the cabinet.
- 2) Fasten the battery by means of the included cable tie.
- 3) Affix the enclosed date label on the outside of the cabinet and write down date and year.

4 Installation Guide

NB In connection with installation of the alarm system, allowance has to be made for frequency inverter mounted nearby. In order to avoid noise nuisances from the frequency inverter, a shielded cable is required between motor and frequency inverter in connection with existing and new installations of the frequency inverter. The screen must be wired to both the frequency inverter and the chassis of the motor.

5 Wiring Diagram



NB The cable must be shielded/protected from rodent attacks and shield/armouring must be connected to terminal 16. Big Dutchman recommends using type **YSY-JZ**.

NB When connecting an external battery, cut the female push-on receptacle off the existing wire and extend it to the external battery.

TIP If a multiple cable is used, + can be used as a common conductor, BUT Dipswitch 4 must then be set to ON and the resistors left out (non-monitored line!).

5.1.1 Systems with Fixed-line network or GSM

- If there is a AC 208 Fixed-line network or GSM in a system with several panels, connect all the panels in a RS485 network. Connect A to A, B to B and connect the shield in all the panels to GND. In this way, the integrated speech computer can monitor the alarms of the other panels. An alarm on an arbitrary panel will then make all the panels activate the alarm outputs and the siren will then only have to be connected to that specific panel (to be connected to a panel with power supply).
- The maximum distance between AC 208 Fixed-line network, GSM or Basis and the AC 208 extension is 10 m. For longer distances, use AC 208 Basis with its own battery.
- The station numbers must be different on all the panels. See section 5.5.

5.1.2 Systems without Fixed-line network or GSM

- Alarm outputs of systems without Fixed-line network or GSM must be connected in parallel or separate sirens must be mounted on the alarm relay outputs. If there is no Fixed-line network or GSM, each panel operates on its own.
- Here, the station numbers are without significance.
- The maximum distance between AC 208 Basis and the AC 208 extension is 10 m. For longer distances, use AC 208 Basis with its own battery.

5.1.3 Alarm Outputs

When an alarm is triggered:

- The alarm relay and FLASH output activate.
- The alarm relay turns off after expiry of the Horn alarm time which is set on the dipswitch.
- After five minutes the CALL output activates. This output is designed for use with external call equipment, e.g. an ATU card for the alarm receiving centre.

When acknowledging alarms, the CALL output terminals are reset to normal status and the siren stops. The FLASH output terminal is active as long as there is an error on an input terminal.

5.2 Starting

The following is to be carried out as a minimum:

AC 208 Fixed-line network

1. Scan stations; press the **#** key for two seconds. After approx. two minutes, the speech computer states the located stations. Please check that this is correct.
2. Enter phone numbers (see section 2.4.2).
3. Record the name of the place monitored by the system (see section 2.4.6).
4. Choose and enter a new password, see section 2.4.8

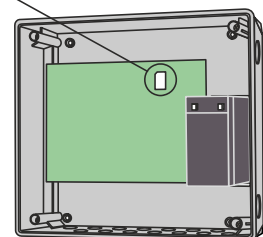
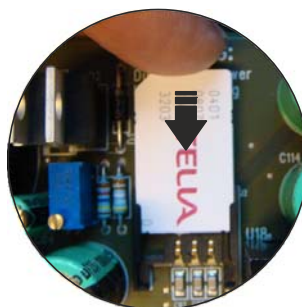
Use the User entry chart (section 7) to review the points to be considered

AC 208 GSM

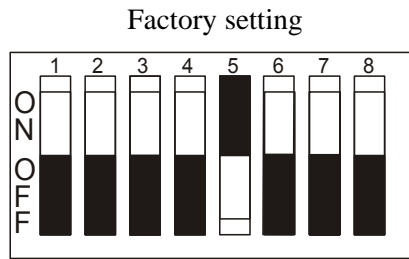
1. Place the SIM card in a mobile telephone
2. Enter the PUK code.
3. Enter the PIN code = 1234 or disconnect the PIN code.
4. Move the SIM card to AC 208 GSM which must be off when the card is mounted.
5. Scan stations; press the **#** key for two seconds. After approx. two minutes, the speech computer states the located stations. Please check that this is correct.
6. Enter phone numbers (see section 2.4.2).
7. Record the name of the place monitored by the system (see section 2.4.6).
8. Choose and enter a new password, see section 2.4.8



Pre-paid mobile service cards may not be used with AC 208 GSM.



5.3 DIPSWITCH on the Computer Board in the Cover



DIPSWITCH


No.

1	OFF				
2	OFF	Selecting a station number (see section 5.5).			
3	OFF				
4	OFF : 150 Ω resistance in cable. Monitored line. Possible to detect both short-circuits and disconnections.	ON : Without resistors Non-monitored line. Can only detect disconnections.			
5	OFF : No battery test	ON : Battery test Only the panels with an integrated supply need to have their battery test function activated.			
	1 min.	2 min.	3 min.	Constantly activated	
6	OFF	ON	OFF	ON	Setting the duration of the horn alarm.
7	OFF	OFF	ON	ON	
8	OFF : -	ON : -			

Bold type indicates factory setting.

5.4 Daily Test of Battery

The 230 V power supply keeps the battery charged for use in case of a power failure. Set dipswitch no. 5 to ON for automatic testing of the battery.

Press the  key for two seconds until the **12 V DC** lamp starts flashing. AC 208 will then disconnect the 230 V supply daily and the battery will be loaded by power resistors. The test lasts for ten minutes, however, only until the first alarm state occurs. If the voltage drops below 11.5 V, an alarm will be triggered.

NB: AC 208 does not contain an actual clock. The inner clock is based on software and is not completely accurate.

If there is a AC 210 in the alarm system, it is a good idea to leave it up to the speech computer to update the clocks in AC 208. This can be done by calling the speech computer and entering the following command:

*** 997** <AC 210 system station number> **#**

The speech computer will then get the time from AC 210 at regular intervals and transmit it to all the AC 208 panels. The test will then be carried out between 8.00 a.m. and 8.10 a.m.

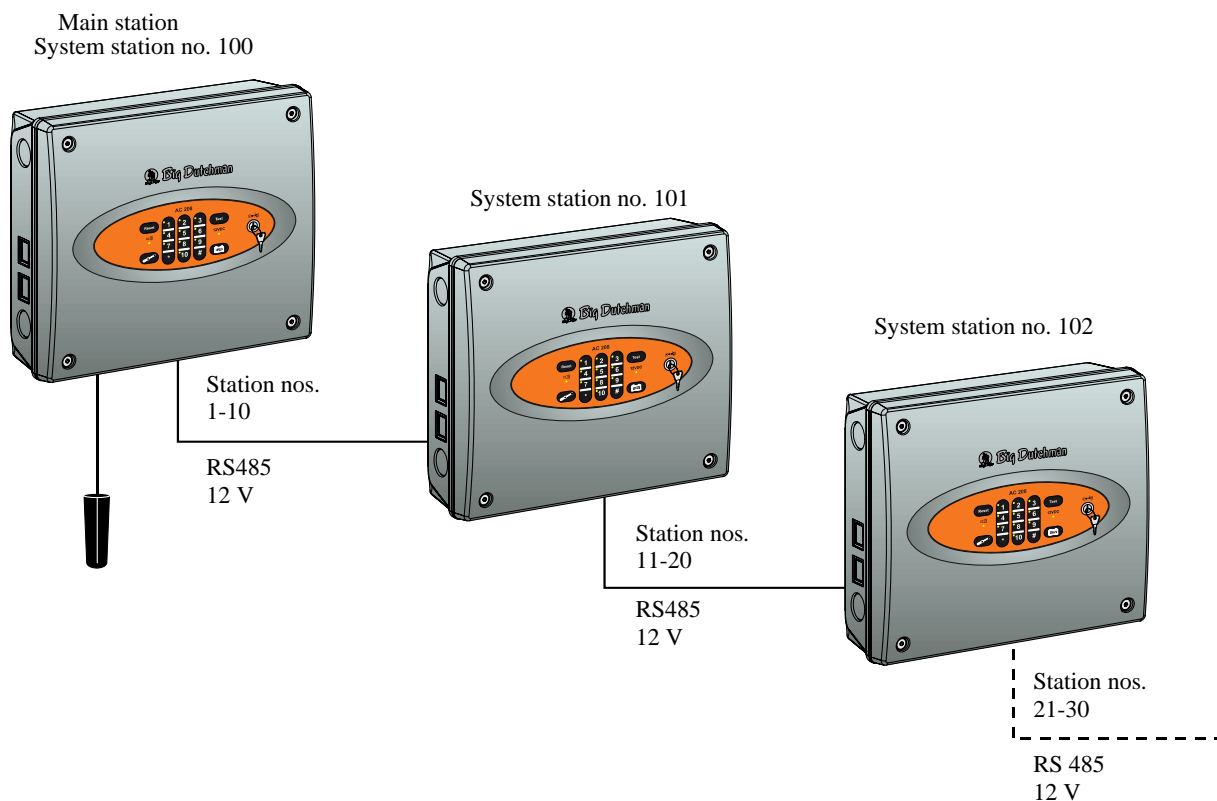
5.5 Station Numbers

Each input has a separate station number so that the speech computer can indicate where an error has occurred. The numbers are arranged automatically in series which are determined when the station number is assigned to the system.

The system has a number to allow system errors to be indicated (errors related to battery, phase breaks, etc.).

Dipswitch			System station number	Inputs are automatically assigned the following station numbers
1	2	3		
0	0	0	100	1-10
1	0	0	101	11-20
0	1	0	102	21-30
1	1	0	103	31-40
0	0	1	104	41-50
1	0	1	105	51-60
0	1	1	106	61-70
1	1	1	107	71-80

Extra alarm panels



5.6 System with Several Alarm Panels

Remember to assign numbers to additional alarm panels in continuation of the main station numbers. The system station numbers are set consecutively to 100, 101, 102, etc.

Changing acceptance duration (30 sec.) and redial (0 min. = switched off) must be set on each control panel, system station no. 100, 101 etc.


6 Maintenance



It is important to maintain and test the alarm system in accordance with the rules of the insurance company.

6.1 Service

Test the alarm system according to the following procedure:

- 1) Select the input to be tested
- 2) Read alarm activation
- 3) Activate the alarm
- 4) Check that the alarm activates as expected (horn, siren, beep, etc.)
- 5) Check that telephone calls are made to the entered numbers
- 6) Stop the alarm (via the # phone key or the alarm system  key)
- 7) Acknowledge on the chart for completed test

AC 208 is maintenance-free; however, the battery deteriorates in the course of time and should therefore be replaced after approx. three years. Check the date label on or at the battery.

The battery can be checked automatically and an alarm be given if the battery is defective. If this is the case, replace the battery immediately.

6.2 Cleaning

Clean AC 208 with a firmly wrung cloth without the use of solvents. Do not expose it to direct water jets or high-pressure cleaning.

As for all electronic equipment it is best for AC 208 to be connected all the time as this will prolong its life and keep it dry and free from condensation.

6.3 Removal for Recycling



Products supplied by Big Dutchman, suitable for recycling, have a pictorial marking in form of a dustbin with a cross over. See picture.

Customers can dispose of Big Dutchman products at local collecting points/recycling stations according to local directions. The recycling station will then arrange for further transport to a certified plant with view to recycling, reclaim and reuse.

7 Technical Data

AC 208 alarm system	
Electricity	
Mains supply	230 V AC +/- 10 %
Mains frequency	50/60 Hz
Power consumption	Maximum 40 VA
Mechanics	
Cable knock-out punches	20 for metric screwed cable connection m25x1.5 (Note! PG 16 does not fit!)
Environment	
Ambient temperature, operation	(-10 to +40 °C (+14 to 140 °F))
Ambient temperature, storage	(-25 to +60 °C (-13 to +140 °F))
Ambient humidity, operation	0-80 % RH
Protection class	Splash proof IP 54 It is assumed that the base is plan, i.e. ≤ 1.5 mm difference of height and that the screws of the cover are tightened with min. 200 Ncm.
Shipping	
Dimensions AC 208	H x W x D: 381 x 400 x 170 mm
Dimensions packed	H x W x D: 425 x 555 x 195 mm
Shipping weight AC 208	9.5 kg

User entries						
	Entry					Factory setting
*1 telephone number #						
*2 telephone number #						
*3 telephone number #						
*4 telephone number #						
*5 telephone number #						
*62 call delay for min. #						5 min.
*71 0 welcome [#]						"Welcome to"
*72 0 name [#]						"speech computer"
*73 0 word [#]						
*74 0 word [#]						
*75 0 word [#]						
*76 0 word [#]						
*77 0 word [#]						
*78 0 word [#]						
*79 0 word [#]						
86 station no. word no. *word no. *word no. #	See separate chart					Example: "Station 1"
*87 1 # (scanning) Number of stations:						
*91 access code #						1
*92 number of rings # (answer call after)						3
*95 number of calls # (to the same no.)						3
*96 word no. # (siren)						-
*97 no. # (first called:)	1	2	3	4	5	1



9 Glossary for Changing Name of Input

'd	108	fifth	125	out_of	260	thirty-	303
's	59	fifty-	305	outdoor	251	time	173
absolute	23	first	121	outlet	159	Time	176
accepted	127	fish	290	output	49	to	53
acknowledged	150	for	119	over	168	too	56
activated	166	fourth	124	oxygen	36	total	254
active	148	fourty-	304	per	248	try_again	128
actual	245	from	54	percent	32	twenty-	302
after	64	future	106	period	244	type	175
alarm	112	gestation	403	ph	37	unit	47
altering	118	has_been	107	please	126	Unit	411
and	113	heating	104	point	115	valid	96
and (short)	117	high	22	porker	402	value	182
answer	93	hours	39	power	143	ventilation	103
are	199	house	410	prefinishing	406	version	197
average	253	humidity	102	press	89	volt	33
battery	162	in	51	processor	198	voltage	34
below	167	inlet	157	puk	152	wait	235
broken_cable	28	input	48	pump	195	water	193
busy	130	integration	172	register	42	weaner	408
by	55	is	58	relative	24	welcome	61
bye	141	level	194	remote	144	with	57
call	98	limitation	156	reset	149	word	133
card	26	limiter	155	room	43	WTF	409
code	66	line	142	second	122	xp	171
command	67	local	145	seconds	241	youngfemale	407
communication	85	low	21	sensor	44	Sounds	
compensation	154	main	160	servicebreak	161	beeb_by_fault	200
controlled_		mating	404	set	105	siren	201
environment	4	maximum	82	seventy-	307	harp_up	202
cooling	192	memory	136	short_circuit	27	harp_down	203
counter	187	minimum	81	sim	129	pop	207
date	243	minus	114	sixty-	306	Numbers	
days	35	minutes	38	soft	256	0-20	0-20
degrees	31	missing	84	special	163	30	30
delay	181	mode	120	speech	62	40	40
dial-tone	188	name	134	square	138	50	50
do	63	net	184	start	86	60	60
eighty-	308	new	164	state	250	70	70
end	139	ninety-	309	station	41	80	80
enter	65	no	92	stations	110	90	90
entry	131	not	94	step	264	100	100
erase	140	now	246	stop	87	1000	1000
error	97	number	69	summer_rise	153	User words	
exchanger	179	Number	111	supervision	146	Words 73-79	73-79
factor	237	of	259	supply	151		
failure	258	off	262	suspended	147		
fan	158	ok	116	switched_off	29		
farrowing	401	old	165	system	249		
faulty	257	on	261	telephone	68		
feed	46	one	99	temperature	101		
feeding	281			test	25		
				the	109		
				third	123		

