Manual

1. General information

User manual for Elektronikon® Graphic controller

Printed Matter Number	:	2946 1798 00
Applicable to	:	GA 5-90
Preliminary Operations	:	-
Safety Instructions	:	General
Persons Required	:	1
Special Tools	:	-
Consumables	:	-

2. Document overview

This document describes the following:

SAFETY = THINK BEFORE YOU ACT

1. STOP
EVALUATE RISKS

3. THINK
SEEK PROPER SOLUTION

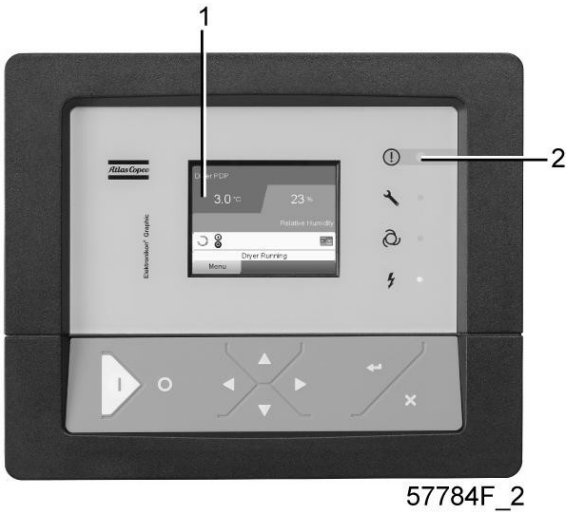
2. ACT
CARRY OUT SOLUTION

PERSONAL PROTECTION KEEPS YOU SAFE

LOCK OUT / TAG OUT
TAKE AWAY THE RISKS

4. Elektronikon® Graphic controller (1900 5200 11)

4.1. General description



Display of the Elektronikon® Graphic controller

4.1.1. Introduction

The Elektronikon controller has following functions:

- Controlling the compressor
- Protecting the compressor
- Monitoring components subject to service
- Automatic restart after voltage failure (made inactive)

4.1.2. Automatic control of the compressor operation

The controller maintains the net pressure between programmable limits by automatically loading and unloading the compressor (on compressors running at a fixed speed) or by adapting the motor speed (compressors with frequency converter). A number of programmable settings, e.g. the unloading and loading pressures (for fixed speed compressors), the setpoint (for compressors with frequency converter), the minimum stop time and the maximum number of motor starts and several other parameters are hereby taken into account.

The controller stops the compressor whenever possible to reduce the power consumption and restarts it automatically when the net pressure decreases. In case the expected unloading period is too short, the compressor is kept running to prevent too short standstill periods.

A number of time based automatic start/stop commands may be programmed. Take into account that a start command will be executed (if programmed and activated), even after manually stopping the compressor.

4.1.3. Protecting the compressor

Shut-down

Several sensors are provided on the compressor. If one of the measured signals exceeds the programmed shut- down level, the compressor will be stopped. This will be indicated on display (1) and general alarm LED (2) will blink.

Remedy the trouble and reset the message. See also the Inputs menu.

Before remedying, consult the applicable safety precautions.

Shut-down warning

A shut-down warning level is a programmable level below the shut-down level.

If one of the measured signals exceeds the programmed shut-down warning level, a message will appear on display (1) and general alarm LED (2) will light up to warn the operator that the shut-down warning level is exceeded.

The message disappears as soon as the warning condition disappears.

4.1.4. Warning

A warning message will appear if, on Full-Feature compressors, the dew point temperature is too high in relation to the ambient temperature.

4.1.5. Service warning

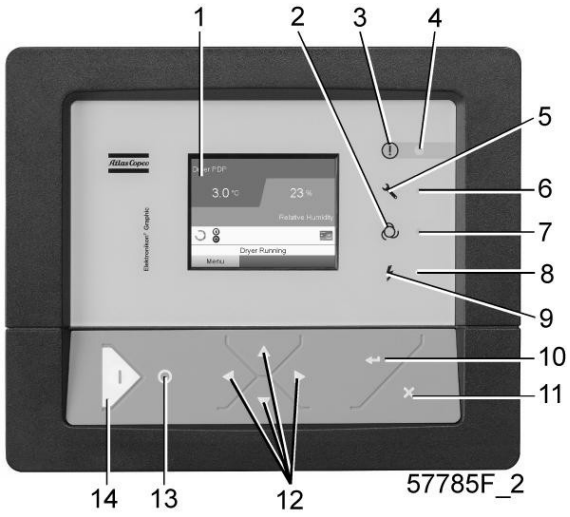
A number of service operations are grouped (called Service Plans). Each Service Plan has a programmed time interval. If a time interval is exceeded, a message will appear on display (1) to warn the operator to carry out the service actions belonging to that Service Plan.

4.1.6. Automatic restart after voltage failure

The controller has a built-in function to automatically restart the compressor when the voltage is restored after voltage failure. For compressors leaving the factory, this function is made inactive. If desired, the function can be activated. Consult the Atlas Copco Customer Centre.

If the function is activated and provided the regulator was in the automatic operation mode, the compressor will automatically restart if the supply voltage to the module is restored.

4.2. Detailed description of the control panel



Control panel, LEDs and buttons

Ref.	Designation	Function
1	Display	Shows the compressor operating condition and a number of icons to navigate through the menu.
2	Pictograph	Automatic operation
3	Pictograph	General alarm
4	Alarm LED	Flashes in case of a shut-down, is lit in case of a warning condition.
5	Pictograph	Service
6	Service LED	Lights up if service is needed
7	Automatic operation LED	Indicates that the regulator is automatically controlling the compressor.
8	Voltage on LED	Indicates that the voltage is switched on.
9	Pictograph	Voltage
10	Enter key	Use this button to confirm the last action.
11	Escape key	Use this button to go to previous screen or to end the current action.
12	Scroll keys	Keys to scroll through the menu.
13	Stop button	Button to stop the compressor. LED (7) goes out.
14	Start button	Button to start the compressor. LED (7) lights up indicating that the Elektronikon regulator is operative.

4.3. Icons used

4.3.1. Status icons

Name	Icon	Description
Stopped / Running	 57786F	When the compressor is stopped, the icon stands still. When the compressor is running, the icon is rotating.
Compressor status	 57787F	Motor stopped
	 57788F	Running unloaded
	 57789F	Running loaded
Machine control mode	 57790F Or  59161F	Local start / stop
	 57791F	Remote start / stop
	 57792F	Network control
Automatic restart after voltage failure	 57793F	Automatic restart after voltage failure is active
Week timer	 57794F	Week timer is active
Active protection functions	 57795F	Emergency stop
	 57796F	Shutdown

Name	Icon	Description
Active protection functions	 57797F	Warning
Service	 57798F	Service required
Main screen display	 59162F	Value lines display icon
	 82196F	Chart display icon
General icons	 81105D	No communication / network problem
	 82418D	Not valid

4.3.2. Input icons

Icon	Description
 57799F	Pressure
 57800F	Temperature
 57801F	Digital input
 57802F	Special protection

4.3.3. System icons

Icon	Description
 57803F	Compressor element (LP, HP, ...)
 57804F	Dryer
 57805F	Fan
 57806F	Frequency converter
 57807F	Drain
 57808F	Filter
 57809F	Motor
 57810F	Failure expansion module
 81105D	Network problem
 57812F	General alarm

4.3.4. Menu icons

Icon	Description
 57813F	Inputs
 57814F	Outputs
 57812F	Alarms (Warnings, shutdowns)

Icon	Description
	Counters
 Or 	Test
	Settings
	Service
	Event history (saved data)
	Access key / User password
	Network
	Setpoint
	Info

4.3.5. Navigation arrows

Icon	Description
	Up
	Down

4.4. Main screen

4.4.1. Function

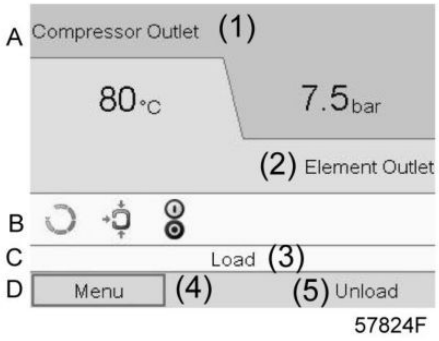
The Main screen is the screen that is shown automatically when the voltage is switched on and one of the keys is pushed. It is switched off automatically after a few minutes when no keys are pushed.

Typically, 5 different main screen views can be chosen:

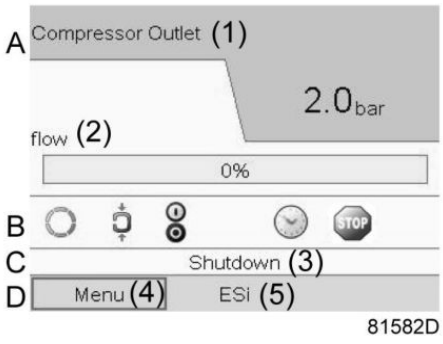
- Two value lines
- Four value lines
- Chart (High resolution)
- Chart (Medium resolution)
- Chart (Low resolution)

4.4.2. Two and four value lines screens

This type of Main screen shows the value of 2 or 4 parameters (see section Inputs menu).



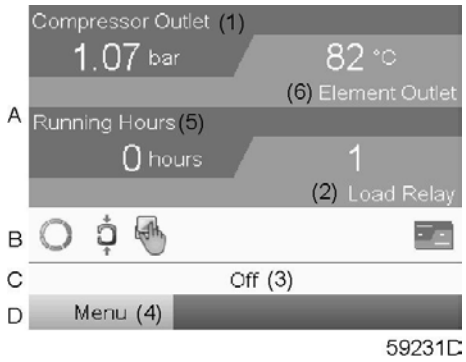
Typical Main screen (2 value lines), fixed speed compressors



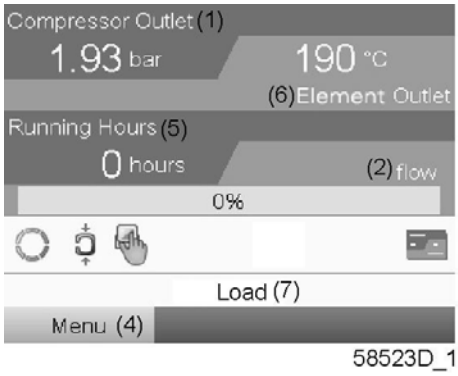
Typical Main screen (2 value lines), compressors with frequency converter

(1)	Compressor Outlet
(2)	Element Outlet (fixed speed compressors) Flow (compressors with frequency converter)
(3)	Load, shutdown, ... (text varies upon the compressors actual condition)

(4)	Menu
(5)	Unload, ES,...(text varies upon the compressors actual condition)



Typical Main screen (4 value lines), fixed speed compressors



Typical Main screen (4 value lines), compressors with frequency converter

(1)	Compressor Outlet
(2)	Load relay (one of the input signals of fixed speed compressors) Flow (compressors with frequency converter)
(3)	Off, Shutdown,... (text varies upon the compressors actual condition)
(4)	Menu
(5)	Running hours
(6)	Element outlet
(7)	Load, Unload, ... (text varies upon the compressors actual condition)

Section A shows information regarding the compressor operation (e.g. the outlet pressure or the temperature at the compressor outlet). On compressors with a frequency converter, the load degree (flow) is given in % of the maximum flow.

Section B shows Status icons. Following icon types are shown in this field:

- **Fixed icons**

  These icons are always shown in the main screen and cannot be selected by the cursor (e.g. Compressor stopped or running, Compressor status (running, running unloaded or motor stopped).

- **Optional icons**

These icons are only shown if their corresponding function is activated (e.g. week timer, automatic restart after voltage failure, etc.)

- **Pop up icons**

  These icons pop up if an abnormal condition occurs (warnings, shutdowns, service,...)

  To call up more information about the icons shown, select the icon concerned using the scroll keys and press the enter key.

Section C is called the Status bar

This bar shows the text that corresponds to the selected icon.

Section D shows the Action buttons. These buttons are used:

- To call up or program settings
- To reset a motor overload, service message or emergency stop
- To have access to all data collected by the regulator

The function of the buttons depends on the displayed menu. The most common functions are:

Designation	Function
Menu	To go to the menu
Modify	To modify programmable settings
Reset	To reset a timer or message

To activate an action button, highlight the button by using the **Scroll** keys and press the **Enter** key.

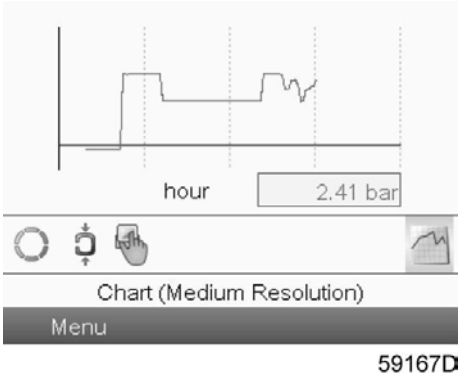
To go back to the previous menu, press the **Escape** key.

4.4.3. Chart views

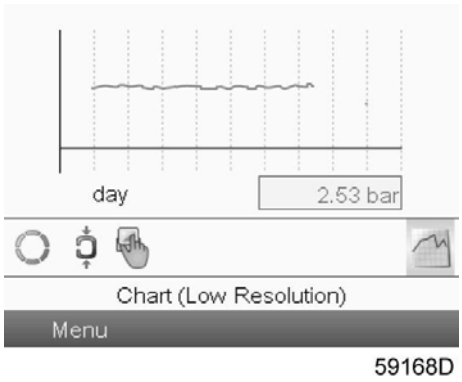
Instead of viewing values, it is also possible to view a graph of one of the input signals (see section Inputs menu) in function of the time.

When **Chart (High Resolution)** is selected, the chart shows the variation of the selected input (in this case the pressure) per minute. Also the instantaneous value is displayed. The screen shows the last 4 minutes.

The switch button (icon) for selecting other screens is changed into a small Chart and is highlighted (active).


hour
2.41 bar
Chart (Medium Resolution)
Menu
59167D

When the **Chart (Medium Resolution)** is selected, the chart shows the variation of the selected input per hour. The screen shows the last 4 hours.

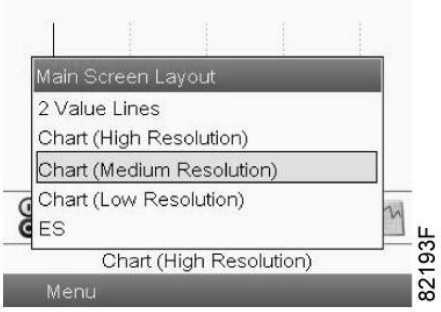


When the **Chart (Low Resolution)** is selected, the chart shows the variation of the selected input per day. The screen shows the evolution over the last 10 days.

4.4.4. Selection of a main screen view

1. To change between the different screen layouts, select the far right icon in the control icons line (see value lines display icon or chart display icon in section Icons used) and press the **Enter** key.

   A screen similar to the one below opens:

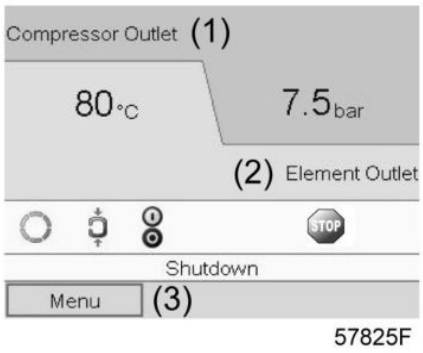


2. Select the layout required and press the **Enter** key. See also section Inputs menu.

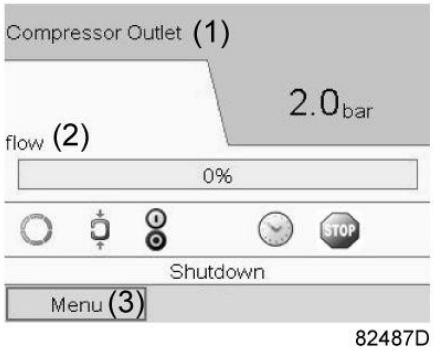
4.5. Calling up menus

4.5.1. Description

When the voltage is switched on, the main screen is shown automatically (see section Main screen):



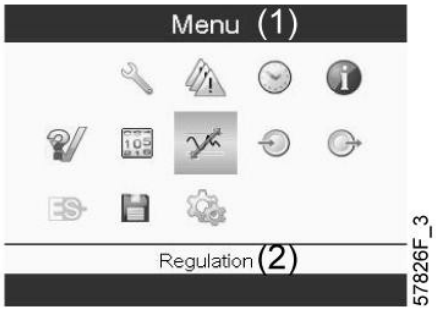
Typical Main screen (2 value lines), fixed speed compressors



Typical Main screen (2 value lines), compressors with frequency converter

3. To go to the Menu screen, highlight the **Menu** button (3), using the **Scroll** keys.
4. Press the **Enter** key to select the menu.

   Following screen appears:



   The screen shows a number of icons. Each icon indicates a menu item. By default, the **Pressure Settings** (**Regulation**) icon is selected. The status bar shows the name of the menu that corresponds with the selected icon.
5. Use the **Scroll** keys to select an icon.
6. Press the **Escape** key to return to the Main screen.

4.6. Inputs menu

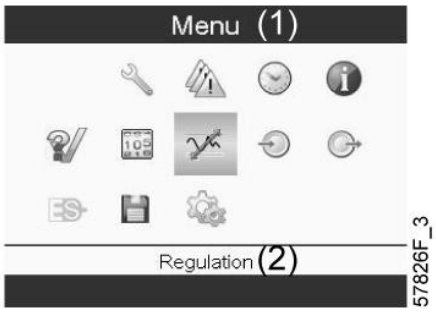
4.6.1. Function

- To display the actual value of the measured data (analog inputs) and the status of the digital inputs (e.g. emergency stop contact, motor overload relay, etc.).
- To select the digital input to be shown on the chart in the main screen.

4.6.2. Procedure

Starting from the main screen,

7. Move the cursor to the action button **Menu** and press the **Enter** key. Following screen appears:

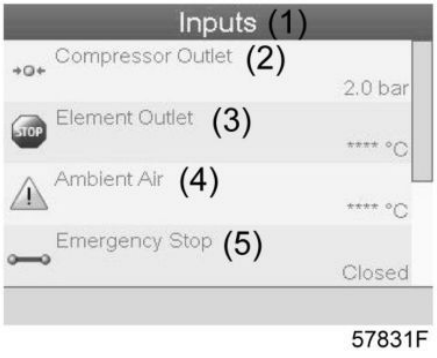


(1)	Menu
(2)	Regulation

8. Using the **Scroll** keys, move the cursor to the **Inputs** icon (see above, section Menu icon).

9. Press the **Enter** key.

A screen similar to the one below appears:



(1)	Inputs
(2)	Compressor outlet
(3)	Element outlet
(4)	Ambient air
(5)	Emergency stop

- The screen shows a list of all inputs with their corresponding icons and readings.
- If an input is in warning or shutdown, the original icon is replaced by the warning or shutdown icon respectively (i.c. the **Stop** icon and the **Warning** icon in the screen shown above).

A small chart icon, shown below an item in the list means this input signal is shown on the chart at the main screen. Any analoginput can be selected.

4.6.3. Selecting another input signal as main chart signal

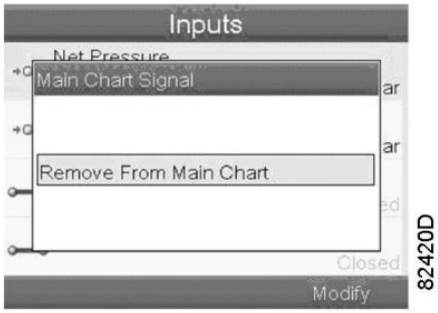
10. With the **Modify** button active (light grey background in above screen), press the **Enter** button on the controller.

A screen similar to the one below appears:

The first item in the list is highlighted. In this example, the **Net Pressure** is selected (chart icon).

11. To change, press the **Enter** button again.

A pop-up window opens:

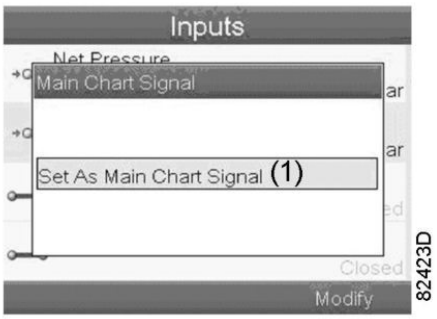


12. Press **Enter** again to remove this input from the chart.

Another confirmation pop-up opens:

13. Select **Yes** to remove or **No** to quit the current action.

In a similar way, another input signal can be highlighted and selected as **Main Chart Signal**:



(1): Set as main chart signal

4.7. Outputs menu

4.7.1. Function

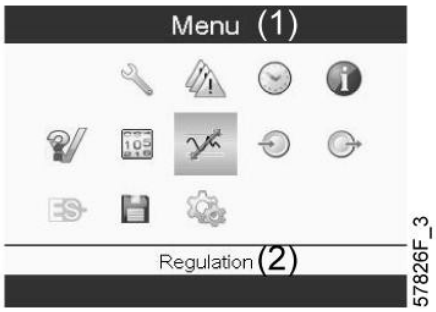
To call up information regarding the actual status of some outputs such as the condition of the Fan overload contact (on air cooled compressors), the Emergency stop contact, etc.

4.7.2. Procedure

Starting from the Main screen,

14. Move the cursor to the action button **Menu** and press the **Enter** key.

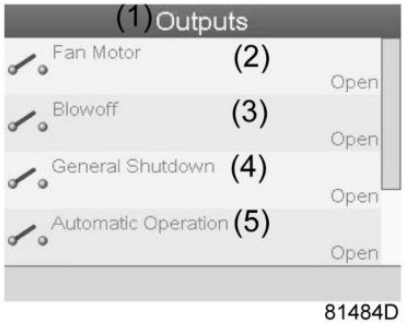
Following screen appears:



(1)	Menu
(2)	Regulation

15. Move the cursor to the **Outputs** icon (see above section Menu icon), using the **Scroll** keys.
16. Press the **Enter** key.

    A screen similar to the one below appears:



Outputs screen (typical)

(1)	Outputs
(2)	Fan motor contact
(3)	Blow-off contact
(4)	General shutdown
(5)	Automatic operation

The screen shows a list of all outputs with their corresponding icons and readings.

If an output is in warning or shutdown, the original icon is replaced by the warning or shutdown icon respectively.

4.8. Counters

4.8.1. Function

To call up:

- The running hours

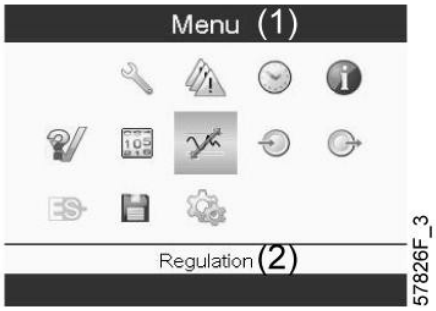
- The loaded hours
- The number of motor starts
- The number of hours that the regulator has been powered
- The number of load cycles

4.8.2. Procedure

Starting from the Main screen (see Main screen),

17. Move the cursor to the action button **Menu** and press the **Enter** key.

Following screen appears:



(1)	Menu
(2)	Regulation

18. Using the **Scroll** keys, move the cursor to the **Counters** icon (see above, section Menu icon)

19. Press the **Enter** key.

Following screen appears:

(1)	Counters
(2)	Running hours
(3)	Motor starts
(4)	Load relay
(5)	VSD 1-20 % rpm in % (the percentage of the time during which the motor speed was between 1 and 20 %) (compressors with frequency converter)

The screen shows a list of all counters with their actual readings.

***Note**: the example above is for a frequency converter driven compressor. For a fixed speed compressor, the actual screen will be somewhat different.*

4.9. Service menu

4.9.1. Function

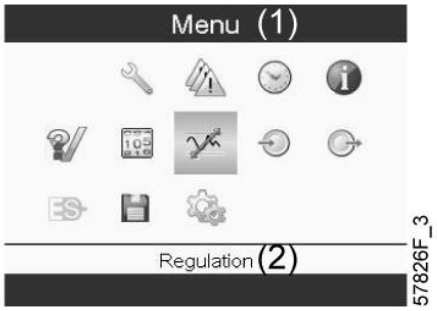
- To reset the service plans which are carried out.
- To check when the next service plans are to be carried out.
- To find out which service plans were carried out in the past.
- To modify the programmed service intervals.

4.9.2. Procedure

Starting from the Main screen,

20. Move the cursor to the action button **Menu** and press the **Enter** key.

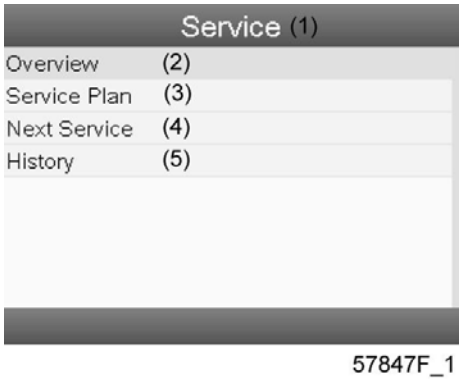
Following screen appears:



21. Using the **Scroll** keys, move the cursor to the **Service** icon (see above, section Menu icon).

22. Press the **Enter** key.

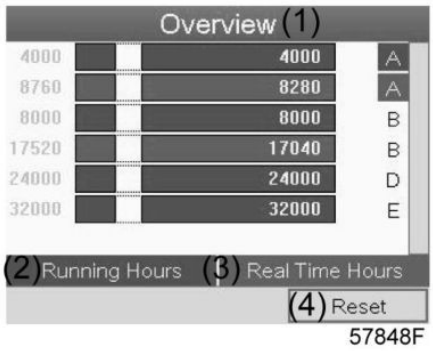
Following screen appears:



(1)	Service
(2)	Overview
(3)	Service plan
(4)	Next service
(5)	History

23. Scroll through the items to select the desired item and press the **Ente**r key to see the details as explained below.

4.9.3. Overview



(1)	Overview
(2)	Running Hours
(3)	Real Time hours
(4)	Reset

Example for service level (A):

The figures at the left are the programmed service intervals. For Service interval A, the programmed number of running hours is 4000 hours (upper row) and the programmed number of real time hours is 8760 hours, which corresponds to one year (second row). This means that the controller will launch a service warning when either 4000 running hours or 8760 real hours are reached, whichever comes first. Note that the real time hours counter keeps counting, also when the controller is not powered.

The figures within the bars are the number of hours to go till the next service intervention. In the example above, the compressor was just started up, which means it still has 4000 running hours or 8280 hours to go before the next Service intervention.

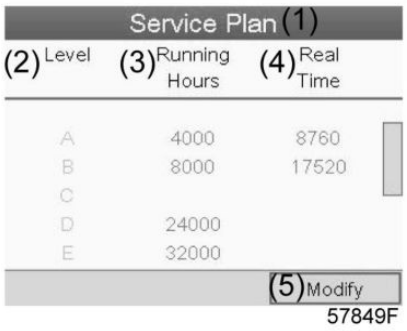
4.9.4. Service plans

A number of service operations are grouped (called Level A, Level B, etc...). Each level stands for a number of service actions to be carried out at the time intervals programmed in the Elektronikon® controller.

When a service plan interval is reached, a message will appear on the screen. After carrying out the service actions related to the indicated levels, the timers must be reset.

24. From the Service menu above, select **Service plan** (3) and press **Enter**.

Following screen appears:



(1)	Service plan
(2)	Level
(3)	Running hours

(4)	Real time hours
(5)	Modify

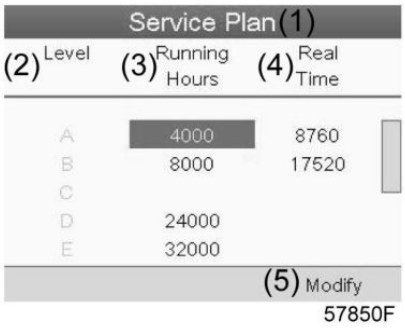
4.9.5. Modifying a service plan

Dependant on the operating conditions, it can be necessary to modify the service intervals.

To do so,

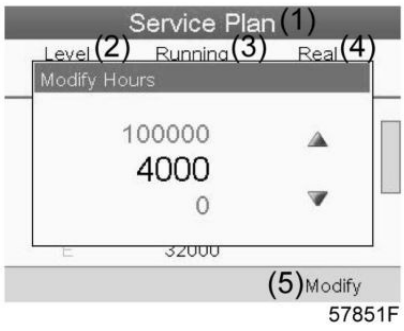
25. Use the **Scroll** keys to select the value to be modified.

A screen similar to the one below appears:



26. Press the **Enter** key.

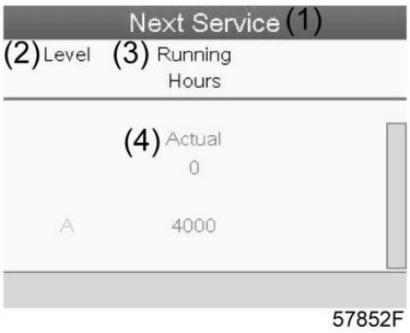
Following screen appears:



27. Modify the value as required using the ↑ or ↓ scroll key and press the **Enter** key to confirm.

Note: *Running hours can be modified in steps of 100 hours, real time hours can be modified in steps of 1 hour.*

4.9.6. Next Service



(1)	Next service
(2)	Level
(3)	Running hours
(4)	Actual

In the example above, the **A** Service level is programmed at 4000 running hours, of which 0 hours have passed.

4.9.7. History

The History screen shows a list of all service actions done in the past, sorted by date. The date at the top is the most recent service action. To see the details of a completed service action (e.g. Service level, Running hours or Real time hours), use the **Scroll** keys to select the desired action and press the **Enter** key.

4.10. Modifying the setpoint

4.10.1. Function

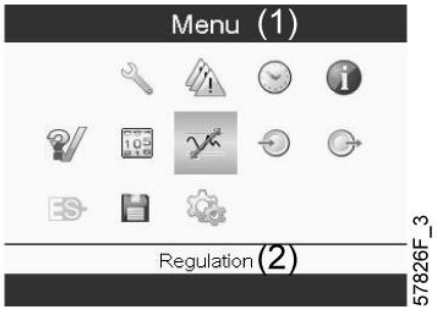
On compressors with a frequency converter driven main motor, it is possible to program two different setpoints. This menu is also used to select the active setpoint.

4.10.2. Procedure

Starting from the Main screen,

28. Highlight the action key Menu using the **Scroll** keys and press the **Enter** key.

Following screen appears:



(1)	Menu
(2)	Regulation

29. Activate the menu by pressing the **Enter** key.

A screen similar to the one below appears:

(1)	Regulation
(2)	Setpoint 1
(3)	Indirect stop level 1
(4)	Direct stop level 1
(5)	Setpoint 2
(6)	Modify

The screen shows the actual settings.

30. To modify the settings, move the cursor to the action button **Modify** and press the **Enter** key.

Following screen appears:

The first line of the screen is highlighted.

31. Use the **Scroll** keys (1) to highlight the setting to be modified and press the **Enter** key (2).

Following screen appears:

The upper and lower limit of the setting is shown in grey, the actual setting is shown in black.

32. Use the ↑ or ↓ key of the **Scroll** keys to modify the settings as required and press the **Enter** key to accept.

33. If necessary, change the other settings as required in the same way as described above.

- Indirect Stop: occurs when the pressure rises to the pre-set Indirect stop setpoint (= setpoint plus **Indirect Stop Level**). The motor will decelerate to minimum speed and the compressor will switch to unloaded condition.

- Direct Stop: occurs when the compressor runs at a speed between minimum and maximum and the net pressure rises above the direct stop setpoint (= setpoint plus **Direct Stop Level**).

Both settings (**Indirect Stop Level** and **Direct Stop Level**) are programmable.

4.11. Event history menu

4.11.1. Function

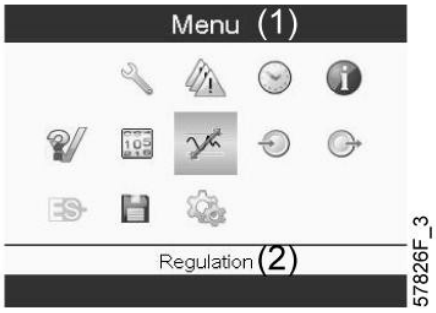
To call up the last shut-down and last emergency stop data.

4.11.2. Procedure

Starting from the Main screen,

34. Move the cursor to the action button **Menu** and press the **Enter** key.

Following screen appears:



35. Using the **Scroll** keys, move the cursor to the **Event History** icon (see above, section Menu icon)

The list of last shut-down and emergency stop cases is shown.

Example of Event History screen

36. Scroll through the items to select the desired shut-down or emergency stop event.

37. Press the **Enter** key to find the date, time and other data reflecting the status of the compressor when that shut-down or emergency stop occurred.

4.12. Modifying general settings

4.12.1. Function

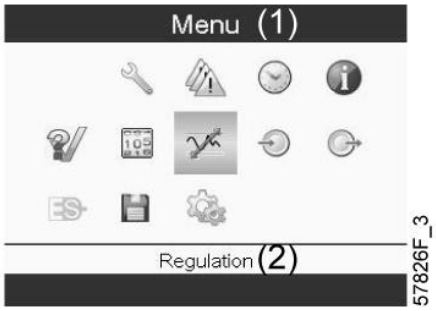
To display and modify a number of settings.

4.12.2. Procedure

Starting from the Main screen,

38. Move the cursor to the action button **Menu** and press the **Enter** key.

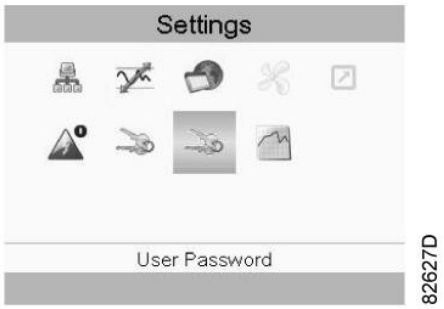
Following screen appears:



39. Next, move the cursor to the **Settings** icon (see above, section menu icon), using the **Scroll** keys.

40. Press the **Enter** key.

Following screen appears:



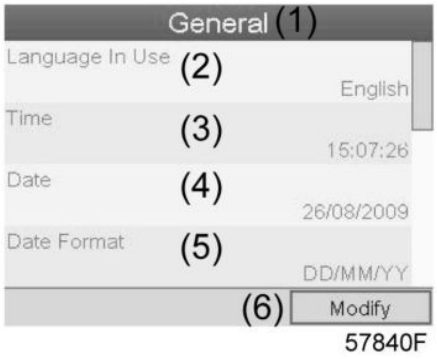
This screen shows again a number of icons. By default, the **User Password** icon is selected. The status bar shows the description that corresponds with the selected icon. Each icon covers one or more items, such as:

- Access level
- Elements
- Dryer
- Fan
- Converter(s)
- Filter(s)
- Motor/Starter
- General

- Automatic restart after voltage failure (ARAF)
- Network
- Regulation
- Remote

41. For adapting certain parameters, a password may be necessary.

Example: Selecting the **General Settings** icon gives the possibility to change e.g. the **Language**, the **Date**, the **Date Format**, etc.:



(1)	General
(2)	Language used
(3)	Time
(4)	Date
(5)	Date format
(6)	Modify

42. To modify, select the **Modify** button using the **Scroll** keys and press the Enter key.

A screen similar to the one above is shown, the first item (**Language**) is highlighted.

43. Use the ↓ key of the **Scroll** keys to select the setting to be modified and press the **Enter** key.

A pop-up screen appears.

44. Use the ↑ or ↓ key to select the required value and press the **Enter** key to confirm.

4.13. Info menu

4.13.1. Function

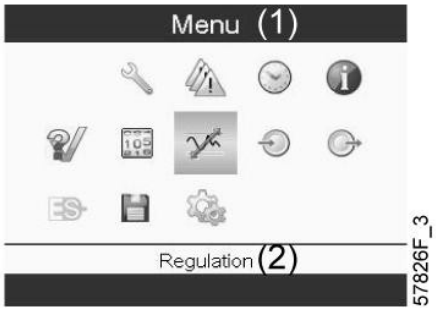
To show the Atlas Copco internet address.

4.13.2. Procedure

Starting from the Main screen,

45. Move the cursor to the action button **Menu** and press the **Enter** key.

Following screen appears:



46. Using the **Scroll** keys, move the cursor to the Info icon (see above, section Menu icon).

47. Press the **Enter** key.

The Atlas Copco internet address appears on the screen.

4.14. Week timer menu

4.14.1. Function

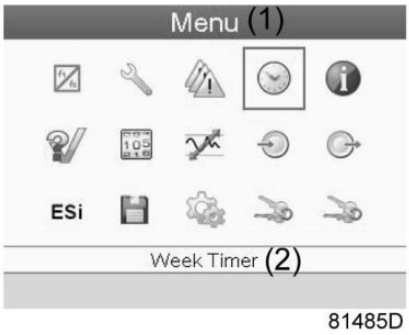
- To program time-based start/stop commands for the compressor
- To program time-based change-over commands for the net pressure band
- Four different week schemes can be programmed.
- A week cycle can be programmed, a week cycle is a sequence of 10 weeks. For each week in the cycle, one of the four programmed week schemes can be chosen.

In the Elektronikon you can select different timers on one day.(up to 8 actions). It is however not possible to program 2 actions at the same time. The solution: leave at least 1 minute in between 2 actions.
Example: Start Compressor: 5.00 AM, Pressure Setpoint 2: 5.01 AM (or later).

4.14.2. Procedure

Starting from the Main screen (see Main screen),

48. Move the cursor to the action button **Menu** and press the **Enter** key. Use the **Scroll** buttons to select the **Timer** icon.



(1)	Menu
(2)	Week Timer

49. Press the **Enter** key on the controller.

Following screen appears:

(1)	Week Timer
(2)	Week Action Schemes
(3)	Week Cycle
(4)	Status
(5)	Week Timer Inactive
(6)	Remaining Running Time

The first item in this list is highlighted in red.

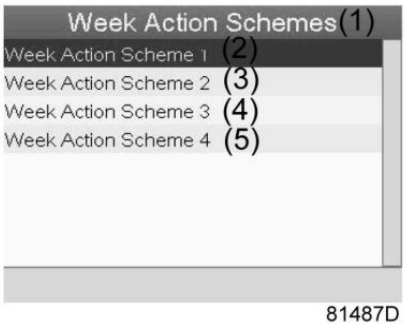
50. Select the item requested and press the **Enter** key on the controller to modify.

4.14.3. Programming week schemes

51. Select **Week Action Schemes** and press **Enter**.

A new window opens. The first item in the list is highlighted in red.

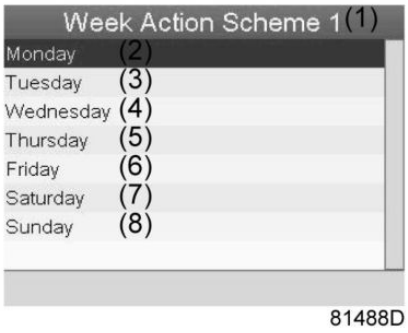
52. Press the **Enter** key on the controller to modify **Week Action Scheme 1**.



(1)	Week Action Schemes
(2)	Week Action Scheme 1
(3)	Week Action Scheme 2
(4)	Week Action Scheme 3
(5)	Week Action Scheme 4

A weekly list is shown. Monday is automatically selected and highlighted in red.

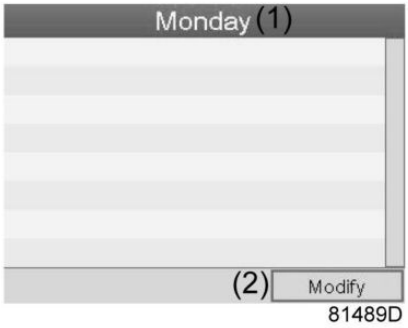
53. Press the **Enter** key on the controller to set an action for this day.



(1)	Week Action Scheme 1
(2)	Monday
(3)	Tuesday
(4)	Wednesday
(5)	Thursday
(6)	Friday
(7)	Saturday
(8)	Sunday

A new window opens. The **Modify** action button is selected.

54. Press the **Enter** button on the controller to create an action.

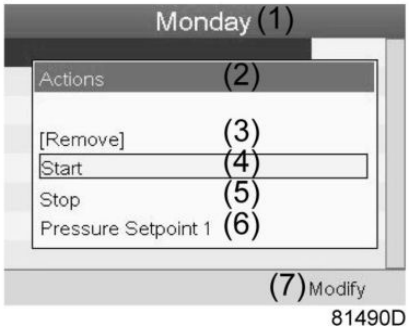


(1)	Monday
(2)	Modify

A new pop-up window opens.

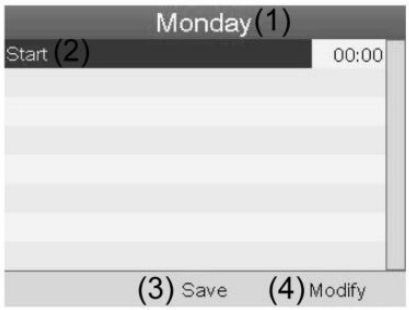
55. Select an action from this list by using the **Scroll** keys on the controller.

56. When ready press the **Enter** key to confirm.



(1)	Monday
(2)	Actions
(3)	Remove
(4)	Start
(5)	Stop
(6)	Pressure Setpoint 1
(7)	Modify

57. A new window opens. The action is now visible in the first day of the week.



81491D

(1)	Monday
(2)	Start
(3)	Save
(4)	Modify

58. To adjust the time, use the **Scroll** keys on the controller and press the **Enter** key to confirm.

81492D

(1)	Monday
(2)	Start
(3)	Save
(4)	Modify

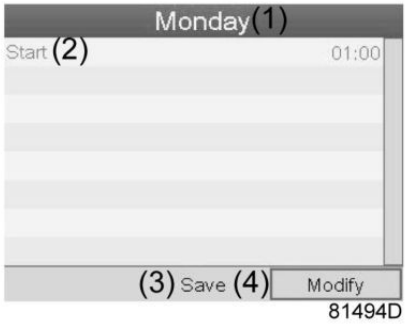
A pop-up window opens.

59. Use the ↑ or ↓ key of **Scroll** keys to modify the values of the hours. Use the ← or → **Scroll** keys to go to the minutes.

(1)	Monday
(2)	Time
(3)	Save
(4)	Modify

Press the **Escape** key on the controller. The action button **Modify** is selected.

60. Use the **Scroll** keys to select the action **Save**.

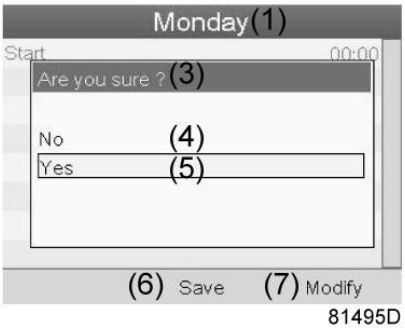


(1)	Monday
(2)	Start
(3)	Save
(4)	Modify

A new pop-up window opens.

61. Use the **Scroll** keys on the controller to select the correct actions.

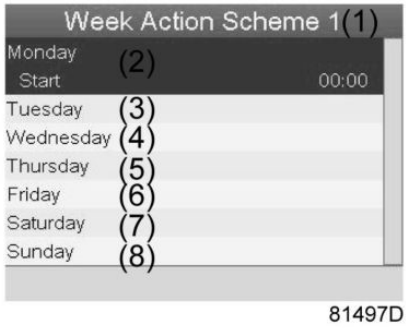
62. Press the **Enter** key to confirm.



(1)	Monday
(3)	Are you sure?
(4)	No
(5)	Yes
(6)	Save
(7)	Modify

63. Press the **Escape** key to leave this window.

The action is shown below the day the action is planned.



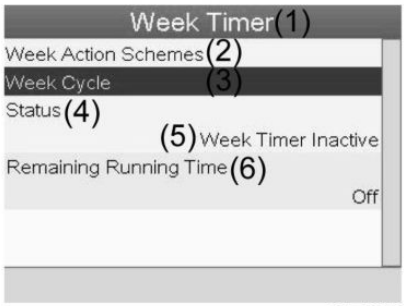
(1)	Week Action Scheme 1
(2)	Monday - Start
(3)	Tuesday
(4)	Wednesday
(5)	Thursday
(6)	Friday
(7)	Saturday
(8)	Sunday

64. Press the **Escape** key on the controller to leave this screen.

4.14.4. Programming the week cycle

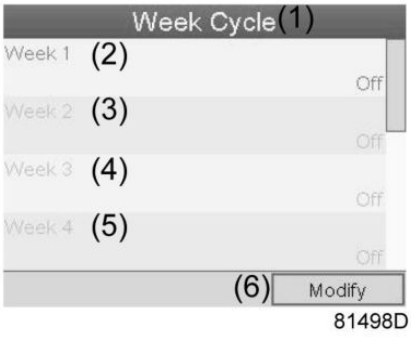
A week cycle is a sequence of 10 weeks. For each week in the cycle, one of the four programmed week schemes can be chosen.

65. Select **Week Cycle** from the main Week Timer menu list.



(1)	Week Timer
(2)	Week Action Schemes
(3)	Week Cycle
(4)	Status
(5)	Week Timer Inactive
(6)	Remaining Running Time

A list of 10 weeks is shown.

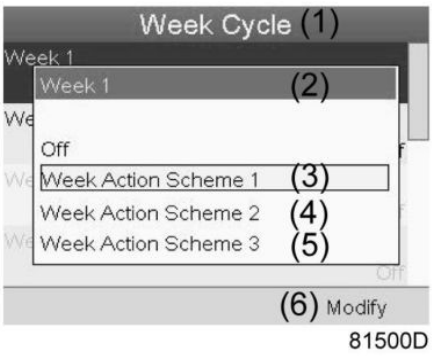


(1)	Week Cycle
(2)	Week 1
(3)	Week 2
(4)	Week 3
(5)	Week 4
(6)	Modify

66. Press twice the **Enter** key on the controller to modify the first week.

A new window opens.

67. Select the action, example: **Week Action Scheme 1.**



(1)	Week Cycle
(2)	Week 1
(3)	Week Action Scheme 1
(4)	Week Action Scheme 2
(5)	Week Action Scheme 3
(6)	Modify

68. Check the status of the **Week Timer**.

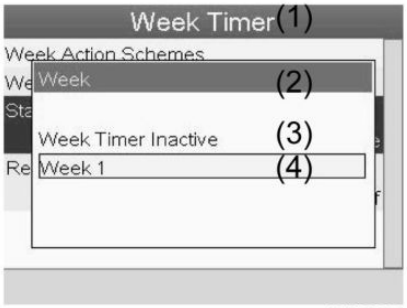
69. Use the **Escape** key on the controller to go back to the main **Week Timer** menu.

70. Select the status of the **Week Timer**.

(1)	Week Timer
(2)	Week Action Schemes
(3)	Week Cycle
(4)	Status
(5)	Week Timer Inactive
(6)	Remaining Running Time

A new window opens.

71. **Select Week 1** to set the **Week Timer** active.



81502D

(1)	Week Timer
(2)	Week
(3)	Week Timer Inactive
(4)	Week 1

72. Press the **Escape** key on the controller to leave this window.

    The **Status** shows that **Week 1** is active.

81503D

(1)	Week Timer
(2)	Week Action Schemes
(3)	Week Cycle
(4)	Status
(5)	Remaining Running Time

73. Press the **Escape** key on the controller to go to the main **Week Timer** menu.
74. Select **Remaining Running Time** from the list and press the **Enter** key on the controller to **Modify**.

81504D

(1)	Week Timer
(2)	Week Action Schemes
(3)	Week Cycle
(4)	Status
(5)	Remaining Running Time

This timer is used when the week timer is set and for certain reasons the compressor must continue working, for example, 1 hour, it can be set in this screen. This timer is prior to the **Week Timer** action.

(1)	Week Timer
(2)	Week action schemes
(3)	Remaining Running Time

4.15. Test menu

or

4.15.1. Function

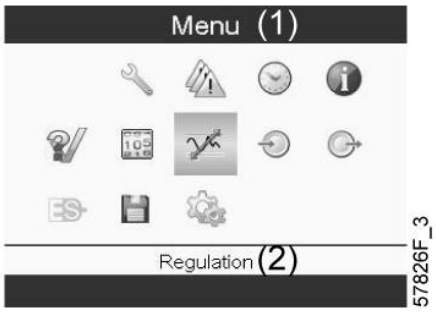
To carry out a display test, i.e. to check whether the display and LEDs are still intact.

4.15.2. Procedure

Starting from the Main screen,

75. Move the cursor to the action button **Menu** and press the **Enter** key (2).

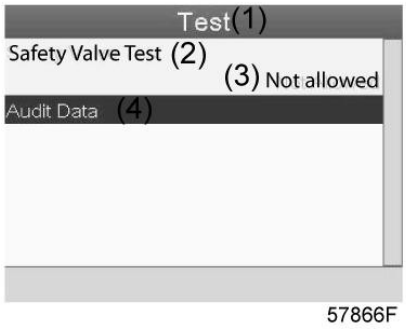
Following screen appears:



76. Using the **Scroll** keys (1), move the cursor to the **Test** icon (see above, section Menu icon)

77. Press the **Enter** key (2).

Following screen appears:



The **Safety Valve Test** can only be performed by authorized personnel and is protected by a security code.

78. Select the item **Display Test** and press the **Enter** key.

A screen is shown to inspect the display, at the same time all LED's are lit.

4.16. User password menu

4.16.1. Function

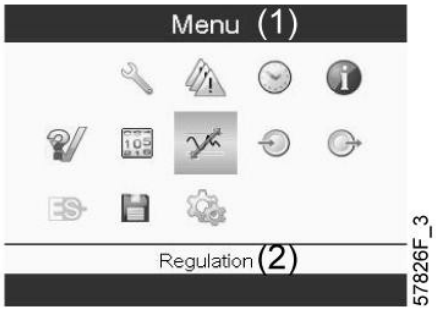
If the password option is activated, it is impossible for not authorized persons to modify any setting.

4.16.2. Procedure

Starting from the Main screen (see Main screen),

79. Move the cursor to **Menu** and press the **Enter** key (2).

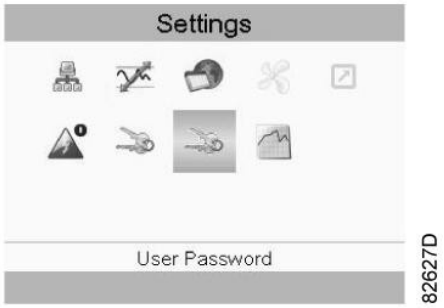
Following screen appears:



80. Using the **Scroll** keys, select the **Settings** icon (see section Modifying general settings)

81. Press the **Enter** key.

Following screen appears:



82. Move the cursor to the **Password** icon (see above, section Menu icon)

83. Select **Modify** using the **Scroll** keys and press the **Enter** key.

84. Next, modify the password as required.

4.17. Web server

All Elektronikon controllers have a built-in web server that allows direct connection to the company network or to a dedicated PC via a local area network (LAN). This allows to consult certain data and settings via a PC instead of via the display of the controller.

4.17.1. Getting started

85. Make sure you are logged in as administrator.

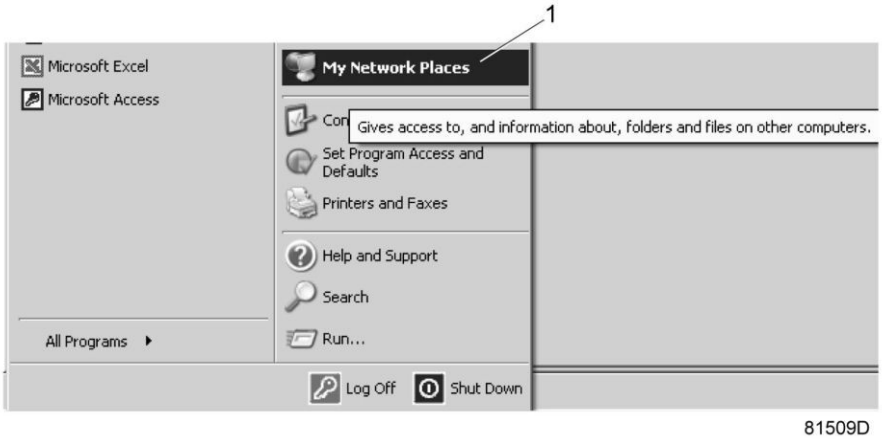
86. Use the internal network card from your computer or a USB to LAN adapter (see picture below).

USB to LAN adapter

87. Use a UTP cable (CAT 5e) to connect to the controller (see picture below).

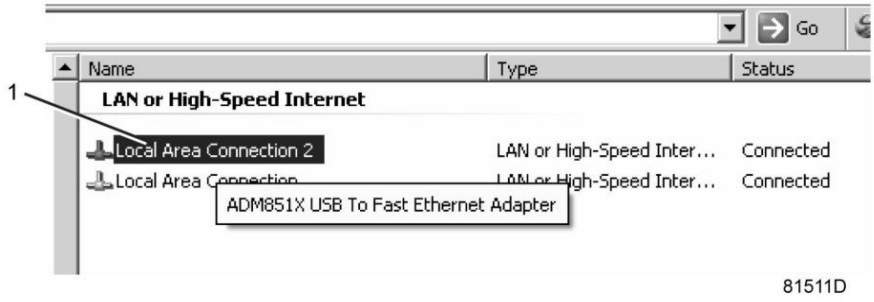
4.17.2. Configuration of the network card

88. Go to **My Network Places** (1).

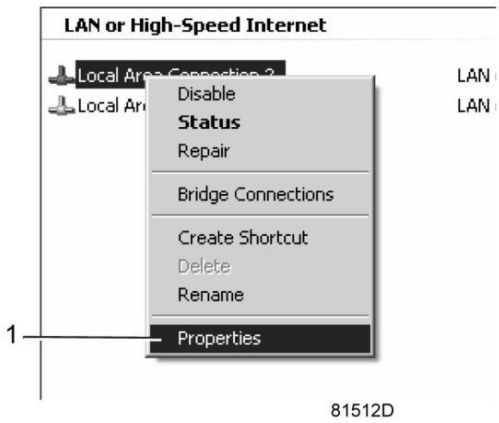


89. Click on **View network connections** (1).

90. Select the **Local Area Connection** (1), which is connected to the controller.



91. Click with the right button and select **Properties** (1).



92. Use the check box **Internet Protocol (TCP/IP)** (1) (see picture).

93. To avoid conflicts, uncheck other properties if they are checked.

94. After selecting **TCP/IP**, click on the **Properties** button (2) to change the settings.

95. Use the following settings:

- IP Address 192.168.100.200
- Subnetmask 255.255.255.0

96. Click **OK** and close network connections.

4.17.3. Configuration of the web server

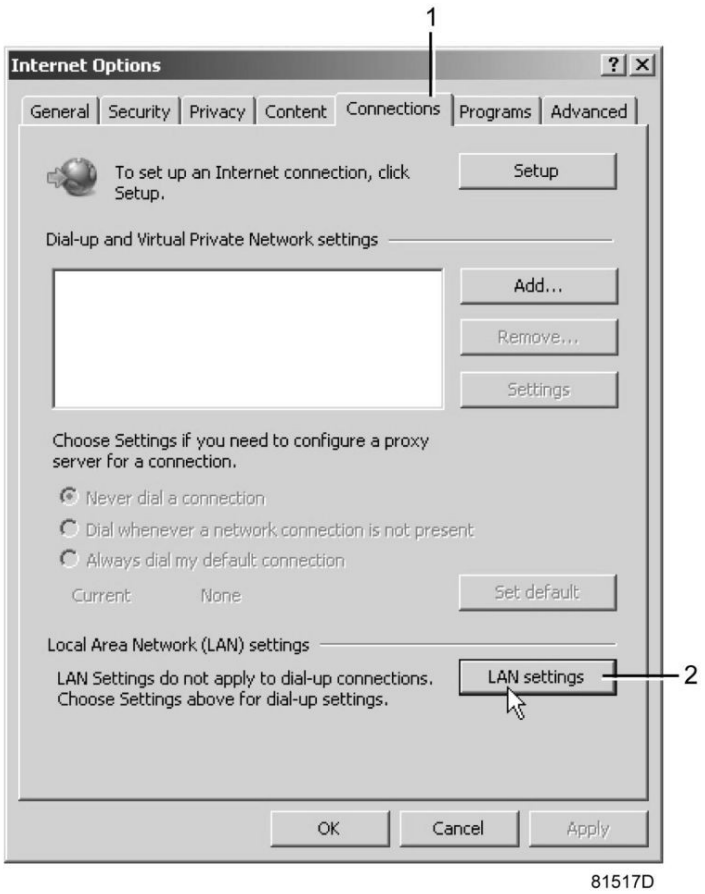
Configure the web interface

The internal web server is designed and tested for Microsoft® Internet Explorer 6, 7 and 8. Other web browsers like Opera and Firefox do not support this internal web server. When using Opera or Firefox, a redirect page opens. Click on the hyperlink to connect to the download server from Microsoft® to download the latest version of Internet Explorer, and install this software.

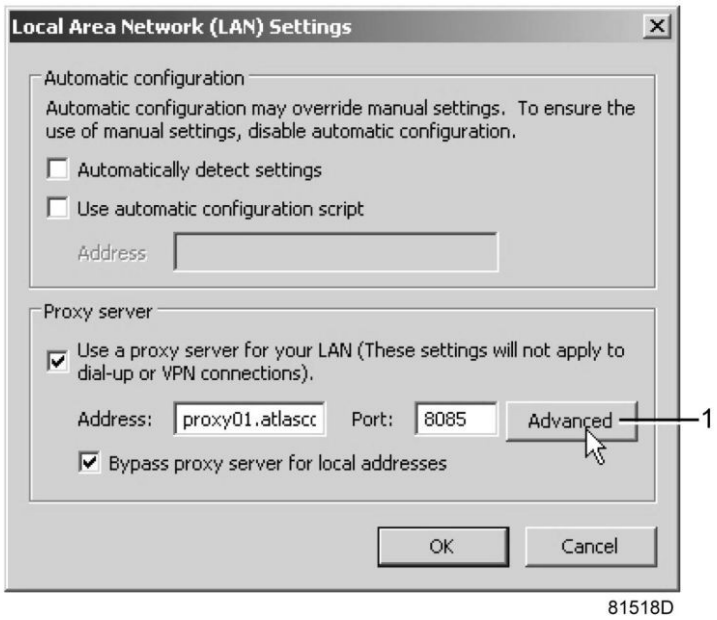
When using Internet Explorer:

97. Open Internet Explorer and click on **Tools** - **Internet options** (2).

98. Click on the **Connections** tab (1) and then click on the **LAN settings** button (2).



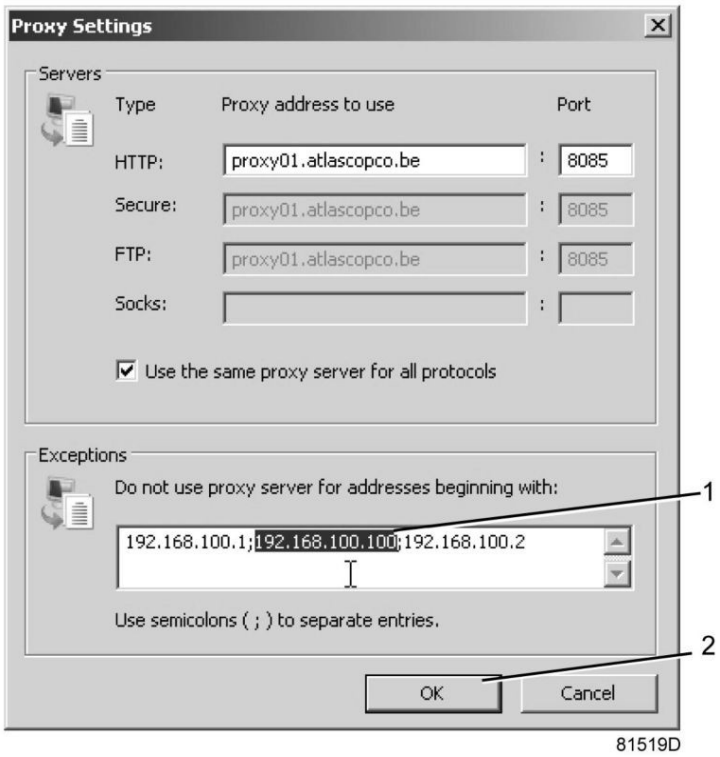
99. In the **Proxy server** group box, click on the **Advanced** button (1).



100. In the **Exceptions** group box, enter the IP address of your controller. Multiple IP addresses can be given but they must be separated with semicolons (;).

Example: Suppose that you already added two IP addresses (192.168.100.1 and 192.168.100.2). Now you add 192.168.100.100 and separate the 3 IP addresses by putting semicolons between them (1) (see picture).

101. Click **OK** (2) to close the window.

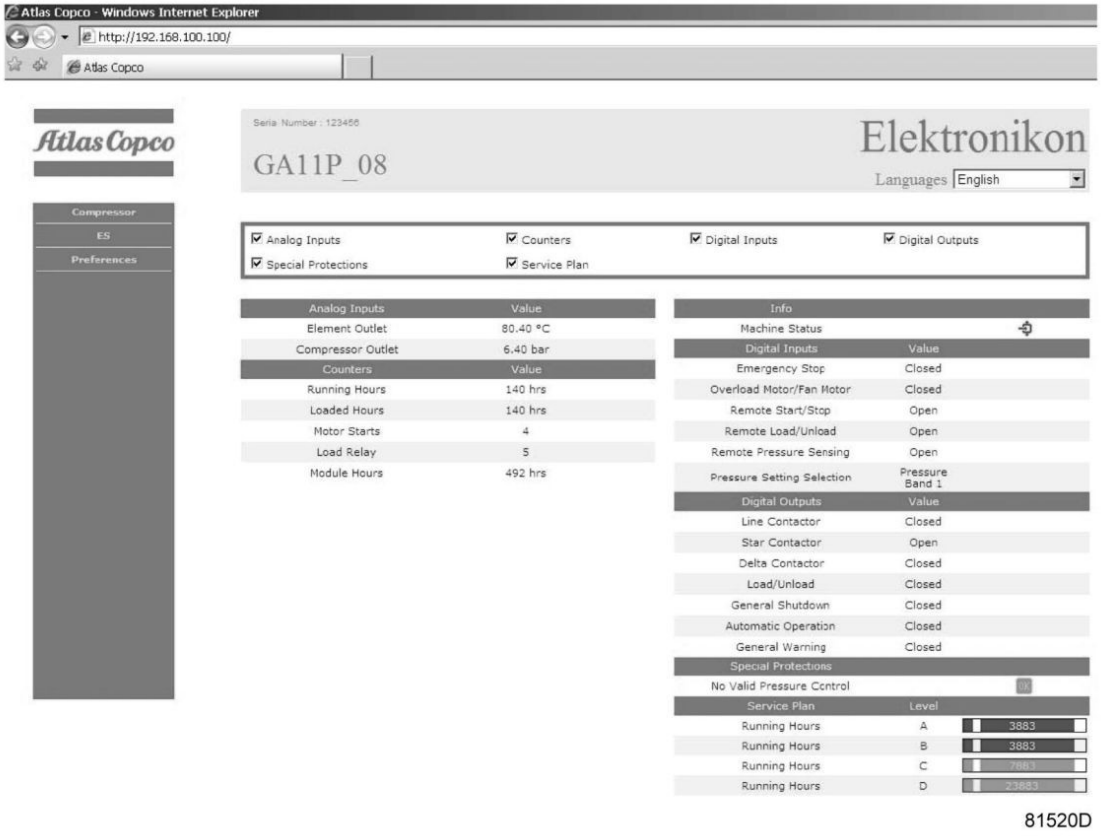

Proxy Settings
Servers
Type
Proxy address to use
Port
HTTP:
proxy01.atlascopco.be
8085
Secure:
proxy01.atlascopco.be
8085
FTP:
proxy01.atlascopco.be
8085
Socks:
Use the same proxy server for all protocols
Exceptions
Do not use proxy server for addresses beginning with:
192.168.100.1;192.168.100.100;192.168.100.2
Use semicolons (;) to separate entries.
OK
Cancel
1
2
81519D

Viewing the controller data

Note: *All screen shots are indicative. The number of displayed fields depends on the selected options.*

Open your browser and type the IP address of the controller you want to view in your browser (in this example http://192.168.100.100).

The interface opens:



81520D

Navigation and options

The banner shows the compressor type and the language selector.

In this example, three languages are available on the controller.

81521D

On the left side of the interface you can find the navigation menu (see picture below).

If a license for ESi is foreseen, the menu contains 3 buttons.

- Compressor (or machine): shows all compressor settings.
- ES: shows the ESi status (if a license is provided).
- Preferences: allows to change temperature and pressure units.

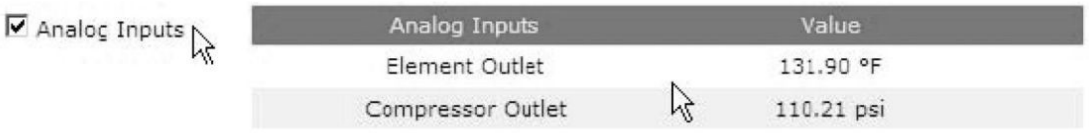
81522D

4.17.4. Compressor settings

All compressor settings can be displayed or hidden. Put a check mark in front of each point of interest and it will be displayed. Only the machine status is fixed and cannot be removed from the main screen.

Analog inputs

Lists all current analog input values. The measurement units can be changed in the preference button from the navigation menu.



81523D

Counters

Lists all current counter values from controller and compressor.

81524D

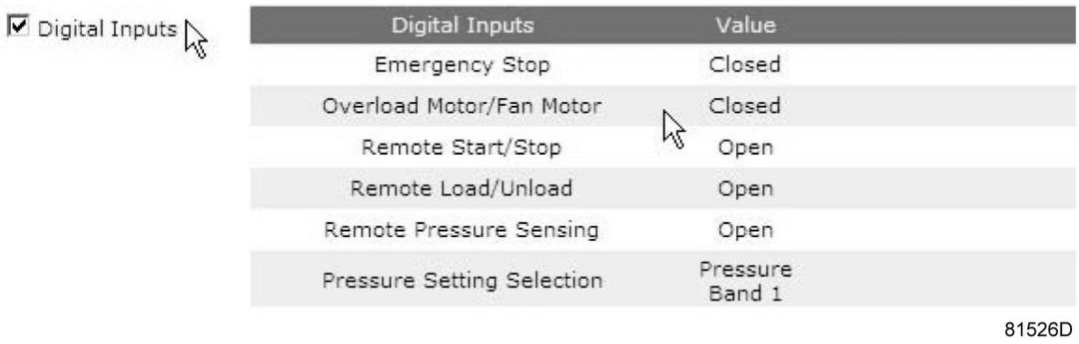
Info status

Machine status is always shown on the web interface.

81525D

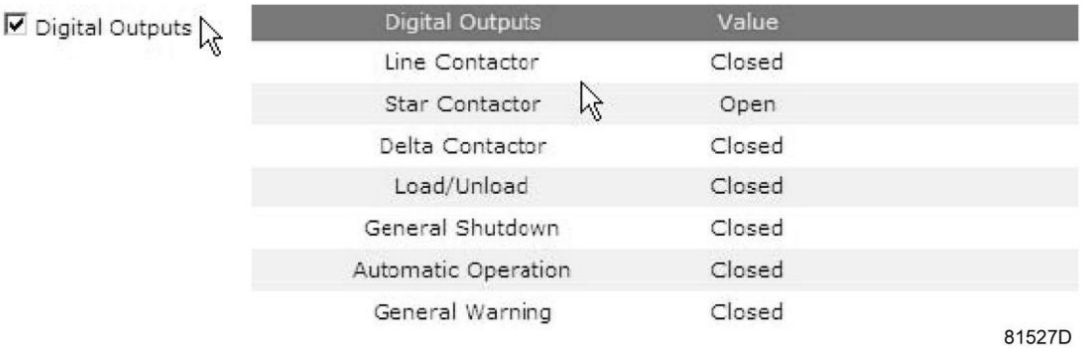
Digital inputs

Lists all Digital Inputs and their status.



Digital outputs

Lists all Digital Outputs and their status.

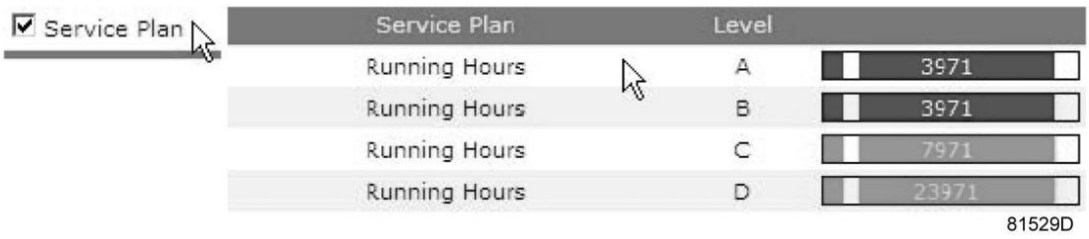


Special protections

Lists all special protections of the compressor.

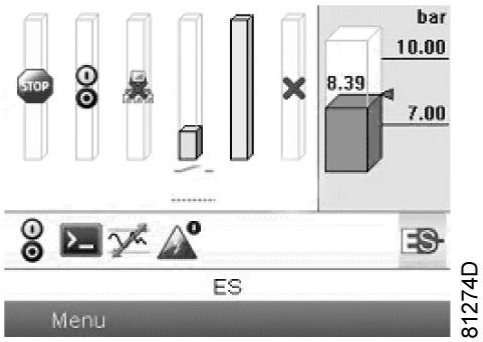
Service plan

Displays all levels of the service plan and their status. This screen shot underneath only shows the running hours. It is also possible to show the current status of the service interval.



ES screen controller

If an ESi license is provided, the ES button is displayed in the navigation menu. At the left all compressors in the ES are shown. At the right the ES status is shown.



A possible ESi screen