



Corrigo E User Guide

Ventilation application

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 **REGIN**

THE CHALLENGER IN BUILDING AUTOMATION

About this user guide

This user guide covers all the models in the Corrigo E series used with the ventilation application.

The document only covers functions which are available to users with Operator access and lower.

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More information

More information about Corrigo E can be found in:

- ***Manual Corrigo E Ventilation*** – Complete manual for configuration and maintenance of Corrigo E with ventilation application, available in Swedish, English, German and French.
- ***Manual E tool*** – Manual on how to configure the controllers using the PC software E tool, available in Swedish, English, German and French.
- ***Lon-interface variable list*** – Variable list for the Corrigo E series, available in Swedish and English.
- ***Network variables for EXOline and Modbus*** – Variable list for EXOline and Modbus communication, available in English.
- ***CE - Declaration of conformity, Corrigo E***

The information is available for download from Regin's website, www.regin.se.

About Corrigo E

Corrigo E is a series of pre-programmed, configurable controllers for different applications.

Corrigo E series comprises three model sizes: 8, 15 or 28 in-/outputs.

Available with or without front panel display and buttons. For units without front panel display and buttons a separate, cable-connected terminal E-DSP with display and buttons is available.

All normal handling can be done using the display and buttons or from a connected computer running Corrigo E tool and using EXOline for communication.



Ventilation application, overview of functions

The controller is loaded with programs for controlling a ventilation unit. The temperature controller is based on a supply air PI-controller for heating control with a pre-programmed set of control modes. A number of different control functions as well as analogue and digital input and output functions can be bound to this controller. Certain functions are necessary, others can be seen as functional options. This flexibility means that what is shown in the display may differ from one unit to another, depending on which functions have been selected.

Functional choices are not made in the operator level, but in the Admin access level by educated personnel with specialised knowledge. The same applies to other configuration. The program for an air handling unit contains, apart from other things, the following functions:

Different temperature control modes

Supply air temperature control, with or without outdoor temperature compensation

Room temperature control (cascade controller).

Extract air temperature control (cascade controller).

Seasonal switching between supply air temperature control and room/extract air temperature control.

Extra, separate temperature control circuit for after-heaters etc.

With control of:

Heat exchanger (liquid connected, plate or rotating) or mixing dampers.
Heating coil: Water with frost protection or electric with high temperature limit switch.
Chiller: Water-heated or DX, up to 3 steps.
Circulation pumps heating, cooling, exchanger.

Fan control

1- or 2-speed supply air fans and extract air fans.
Frequency controlled supply and extract air fans with pressure or flow control, manual control or external control from a VAV system. Pressure controlled supply air fan with slave connected extract air fan (output dependent or flow dependent).

Humidity control

Either humidification or dehumidification or both humidification and dehumidification can be used.

Timer control

For starting and stopping the unit. Up to 5 timer outputs for control of external functions such as lighting, doorlocks etc.

Demand control

In buildings with strongly varying occupancy the fan speeds or mixing dampers can be controlled by the air quality measured by a CO₂/VOC sensor.

Support control

When using the control function room control or extract air temperature control, it is possible to utilise support-heating and/or support-cooling.

Free cooling

When this function has been activated, it is used during the summer to cool the building during the night using cool outdoor air thereby reducing the need to run chillers during the day.

Enthalpy control

Measures and compares the energy content (enthalpy) of the outdoor air and the extract air (temperature and air humidity). When this function is active, the mixing damper signal will be overridden to recirculation if the enthalpy is higher outdoors than indoors.

Pretreatment

Damper and pump control for preheating or precooling of the outdoor air via an underground intake channel.

Cooling recovery

If the extract air is colder than the outdoor air and cooling is required, the heat exchanger control is reversed in order to return the cool extract air.

Recirculation control

Recirculation of air using a supply air fan and recirculation damper, with or without temperature control.

Step controllers Heating/Cooling

As an alternative to the analogue control of "Actuator heating Y1" or "Actuator cooling Y3" step controllers can be used for controlling heating or cooling in steps using digital control.

Display, buttons and LEDs

This section is applicable to Corrigo E units with display and buttons but also to the hand terminal E-DSP which can be connected to Corrigo E units without display and buttons.



E-DSP

Display

```
Regulator vent. sys
2008-11-20 13:30
System: Running
Sp: 18.0 Act: 18.2°C
```

The display has 4 rows of 20 characters. It has background illumination. The illumination is normally off, but is activated as soon as a button is pressed. The illumination will be turned off again after a period of inactivity.

Buttons and LEDs



ARROW UP:

Move up a row in the menu.
(Increase parameter value)



ARROW DOWN:

Move down a row in the menu.
(Decrease parameter value)



ARROW RIGHT:

Move to a lower menu level.
(Move the cursor to the right in the parameter)



ARROW LEFT:

Move to a higher menu level.
(Move the cursor to the left in the parameter)



OK:

Open/Activate a selected menu/setting.
(Confirm a parameter value)



ALARM:

Press to view the alarm list.



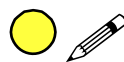
CLEAR:

Reset/Abort a parameter change unless OK has already been pressed.



ALARM LED:

Red, flashing light when there is an unacknowledged alarm. Non-flashing light when there is an acknowledged alarm which has not been reset.



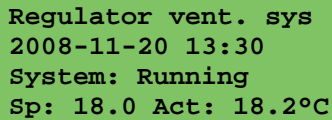
WRITE LED:

Some menus contain settable values. This is indicated by the yellow LED flashing. The value can be changed by pressing OK.

The menu system

Navigating the menus

The choice of access level/user access determines which menus are shown.



```
Regulator vent. sys
2008-11-20 13:30
System: Running
Sp: 18.0 Act: 18.2°C
```

The start display, the display normally shown, is at the basic level of the menu tree. The appearance of the start display may vary since there are 5 types to choose from during configuration. The text in the first row can also be changed via E tool.

Sp and Av are Setpoint and Actual value for the supply air controller. This also applies when using cascaded room temperature or extract air temperature control.

Actual value = The current measured temperature.

Setpoint value = The desired configured temperature.

Pressing ARROW DOWN will move you through the menu choices at this, the lowest level. ARROW UP will move you back through the choices.

Which menus are shown depends on which access level you are using (see the section Access rights for more information about logging on to higher levels).

The basic access level, the level normally active when you have not logged on, only shows a limited number of menus and submenus:

Running mode

Here, you can view and set the unit's running mode, as well as view selected control functions and alarm events.

Temperature, Air control and Humidity control

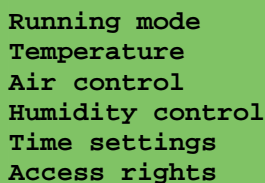
Here, relevant values and setpoint values are displayed. Setpoints can only be changed if you have Operator access or higher.

Time settings

Here, the time, date and set running times are shown. Values can only be changed if you have Operator access or higher.

Access rights

Here, you can log on to a higher level, log off to the basic level and change the password.



```
Running mode
Temperature
Air control
Humidity control
Time settings
Access rights
```

A user with Normal access, the basic level, can view a limited selection of menus. The unit's running mode can be changed and alarms acknowledged.

If you have Operator access, you can access more information and change other operation parameters like setpoints and time functions.


To get to the next menu level, use ARROW UP and ARROW DOWN to place the display marker opposite the menu you wish to access and press ARROW RIGHT. If you have sufficient log on privileges the display will change to the menu you have chosen.

At each level there may be several new menus through which you may move using the ARROW UP and ARROW DOWN buttons.

Sometimes there are further submenus linked to a menu or menu item. This is indicated by an arrow symbol at the right-hand edge of the display. To choose one, use ARROW RIGHT again.

To go to a previous menu level, press ARROW LEFT.

Change parameters

In some menus there are parameters that can be set. This is indicated by the yellow LED with  flashing.

A quick blinking (2 times/s) indicates that the parameter can be changed using the present user access.

A slower blinking (1 time/s) indicates that a higher user access is required to change the parameter.

To change a parameter, first press the OK button. If you need a higher user access than you have to change the parameter, a log on menu will be displayed, see below. Otherwise, a cursor will appear at the first settable value. If you wish to change the value, do so by pressing the ARROW UP and ARROW DOWN buttons.

In numbers containing several digits you can move between the digits using the ARROW LEFT/RIGHT buttons.

When the desired value is displayed press OK.

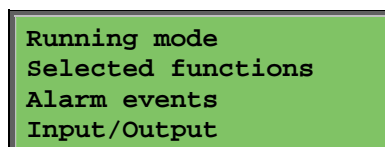
If there are further settable values displayed the cursor will automatically move to the next one.

To pass a value without changing it, press RIGHT.

To abort a change and return to the initial setting, press and hold the C-button until the cursor disappears.

Collected here are a number of menus showing running mode, selected functions, alarm events and status of inputs and outputs.

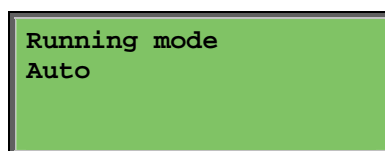
Running mode



```
Running mode
Selected functions
Alarm events
Input/Output
```

Running mode unit

The unit's running mode can be changed without logging on.



```
Running mode
Auto
```

The running mode can be set to **Auto**, **Off**, **Manual reduced run** or **Manual normal run**. The **Auto** mode should normally be used.

Off can be used to stop the unit for service and similar. **Manual normal run** or **Manual reduced run** will start the unit even if the timer says that the running mode should be "Off".

If the running mode is set to **Off**, **Manual normal run** or **Manual reduced run**, a C alarm is activated: Running mode Manual. The alarm automatically resets when the running mode is set to **Auto** again.

Running time
SAF: 14.6 h
EAF: 14.4 h

Shows the accumulated running times for the fans.

Selected functions

Control function
Supply air control
Fan control
1-speed

In these menus, you can see how some of the most important functions have been configured. Changes cannot be made.

Heating: Water
Exchanger: Plate exc
Cooling: Water

Heater, exchanger and cooling type.
If one of the functions is not used, it will be shown as "Not used".

Free cool active: No

This function is used during the summer to cool the building night-time using cool outdoor air, thereby reducing the need for cooling during the day and saving energy.

Support control
Active: Yes
CO2/VOC active
If time channel on

Support control is used for adjusting the room temperature outside of the normal running time. If there is a heating or cooling demand in the room, the unit will start and the temperature will be adjusted.

Fire damper function
Not active
Operation when alarm
Stopped

The fire function determines the settings for the fire dampers and the unit's running mode when a fire alarm is activated.

Frost protection
Active
Cooling recovery
Not active

Frost protection is normally always used in water heating systems. The cooling recovery function reverses the heat exchanger in order to return cooling from the extract air when the extract air is colder than the outdoor air and cooling is required.

External setpoint
Not active

An analogue input can be configured for an external setpoint device e.g. TG-R4/PT1000.

Alarm events

```
24 Nov 14:32 B
Malf. SAF
Acknowledged
```

Alarm log which contains the 40 latest alarm events. The most recent event is listed first. The alarm log can only be used for viewing the alarm history. Alarms are handled in a special area, see the section Alarm handling.

Inputs/Outputs

```
AI
DI
UI
AO
DO
```

These menus show the current values for all configured inputs and outputs.

These are read-only menus. No changes can be made here.

Universal inputs can be configured as either analogue or digital inputs.

Analogue inputs and digital outputs are shown here as examples.

Analogue inputs

```
AI1: 18.5 Outdoortemp
AI2: 20.3 Supplytemp
AI3: 28.2 Frost.temp
AI4: 19.9 Room1.temp
```

The current values for the analogue inputs and outputs are shown here.

Digital outputs

```
DO1:Off SAF 1/1-speed
DO2:Off EAF 1/1-speed
DO3: On SAF 1/2-speed
DO4:Off EAF 1/2-speed
```

This menu shows if the digital inputs and outputs are On or Off.

Temperature

Here you can view all actual and setpoint values for temperature control. The menu is visible to all users, regardless of log on level. However, to make changes you need at least Operator authority.

The following menus are available providing that the corresponding input is activated:

Setpoint Supply air temperature control

```
Outdoortemp.:18.4°C
Supply air temp
Act.: 19.8°C Setp→
Setp.: 20.0°C
```

Setpoint Supply air control. Here, Actual and Setpoint values are shown, as well as the outdoor temperature if an outdoor sensor has been configured. This is a read-only menu. No settings can be made here.

```
Supply air temp
Setp.: 20.0°C
```

Submenu: Setpoint.

Setpoint Outdoor temperature compensated Supply air control

```
Outdoor temp.:18.4°C
Supply air temp
Actual: 19.8°C Setp→
Setp.: 20.0°C
```

Setpoint Outdoor compensated supply air control. Here, Actual and Setpoint values are shown, as well as the outdoor temperature if a outdoor sensor has been configured. This is a read-only menu. No settings can be made here.

```
Outdoor comp. setp.
-20.0°C = 25.0°C
-15.0°C = 24.0°C
-10.0°C = 23.0°C
```

Submenus: Setpoint

In control modes Supply air control/Room control and Supply air control/Extract air control , the setpoint relationship is used when supply air control is active.

```
Outdoor comp. setp.
-5.0°C = 23.0°C
0.0°C = 22.0°C
5.0°C = 20.0°C
```

Use the eight breakpoints to generate a setpoint / outdoor temperature relationship.

```
Outdoor comp. setp.
10.0°C = 19.0°C
20.0°C = 18.0°C
```

In-between-values are calculated using straight lines between breakpoints.

Setpoints for temperatures lower than the lowest breakpoint and higher than the highest breakpoint are calculated by extending the line between the two last breakpoints at either end.

Example: At the lower end the setpoint is increasing by 1°C for every 5 °C lowering of the outdoor temperature. So the setpoint at -23°C would be 25°C + .6x 1.0°C = 25.6°C.

Setpoint Cascaded Room temperature control

```
Room temp.1
Actual: 22.0°C
Setpoint: 21.5°C ->
```

Setpoint Cascaded room temperature control. In control mode Supply air control/Room control, the setpoint is used when cascade connected room control is active.

```
If cascade control
max/min supply setp.
Max: 30.0°C
Min: 12.0°C
```

Submenu for setting the min and max limitation temperatures for the supply air.

Room temp.2
Actual: 21.8°C

If two room sensors have been configured you will also get this menu. The controller uses the average temperature of the two sensors.

Setpoint Cascaded extract air temperature control

Extract air temp.
Actual: 21.0°C
Setpoint: 21.1°C

Setpoint Cascaded extract air temperature control.

In control mode Supply air control/Extract air control, the setpoint is used when cascaded extract air control is active.

If cascade control
max/min supply setp.
Max: 30.0°C
Min: 12.0°C

Submenu for setting the min and max limitation temperatures for the supply air.

Support control heating / Support control cooling

Support heating
Room temp for
Start: 15.0°C
Stop: 21.0°C

Support control is normally used when room temperature control or extract air control has been configured, to prevent a too large offset in temperature when the unit is "Off".

Support cooling
Room temp for
Start: 30.0°C
Stop: 28.0°C

"Support control Heating" or "Support control Cooling" will run if support control is configured, the running mode is "Off" (timer control OFF and not in extended running) and if conditions call for support control.

Minimum run time is settable 0 to 720 minutes (FS= 20 minutes).

Frost protection temperature

Frost protection
Actual: 30.9°C

Relevant value for the water temperature at the frost protection sensor.

Exchanger de-icing

De-icing exchanger
Actual: 11.2°C
Setpoint: -3.0°C
Hysteresis: 1.0°C

This menu is shown if exchanger de-icing has been configured. If the temperature at the de-icing sensor drops below the setpoint value, the de-icing function is started. It is stopped when the temperature has risen above the setpoint plus the set differential.

Heat exchanger efficiency monitoring

```
Efficiency exch.  
Actual: 93%  
Output exchanger  
Actual: 100%
```

The function calculates the heat exchanger temperature efficiency in % when the output signal to the exchanger is higher than 5% and the outdoor temperature is lower than 10°C. The function requires an extract air sensor, an exhaust air sensor and an outdoor sensor.

When the control signal is lower than 5% or the outdoor temperature is higher than 10°C the display will show 0%.

Recirculation

```
Offset SAF when  
frequency control  
and recirculation:  
0.0 Pa
```

Recirculation is a function for distributing the air in the room using the supply air fan. The function can be used even when there is no heating or cooling demand. When using recirculation control, the extract air fan stops and a recirculation damper opens which allows the air to circulate through the unit.

```
Temp.setpoint when  
recycling (supply/  
extract/room)  
18.0°C
```

During recirculation, offset SAF makes it possible to add to the supply air fan an offset to the setpoint during normal operation.

If pressure control has been configured, the offset is set in Pa. If flow control has been configured, it is set in m³/h. If manual control has been configured, the offset is set in %.

If you have selected the Offset function, which is a deviation from the regular supply air setpoint, you will instead be given the option to change this offset value here.

Extra control circuit

```
Extra control circuit  
Actual: 21.2°C  
Setpoint: 20.0°C
```

An independent temperature control circuit for control of for example after-heaters. The circuit can be configured to either heating or cooling.

Enthalpy control

```
Enthalpy indoor:  
35.5 kJ/kg  
Enthalpy outdoor:  
36.4 kJ/kg
```

Enthalpy control is a function for overriding the mixing damper output signal to recirculation if the enthalpy is higher outdoors than indoors.

```
Outdoortemp  
Act.: 19.2 °C  
Humidity outdoor  
Act.: 51.1 % RH
```

Submenu for reading of outdoor temperature and outdoor air humidity.

```
Indoortemp
Act.: 19.9°C
Humidity indoor
Act: 44.3 % RH
```

Submenu for reading of indoor temperature and air humidity in the room.

```
Override Cool Reco-
very due to Enthalpy:
Active
```

Shows if enthalpy control is active or not.

Air control

This menu is only shown if frequency controlled fans have been configured.

Depending on the choice of fan control, different combinations of the menus below will be shown.

Pressure control SAF. (There are also corresponding menus for EAF)

```
Pressure contr. SAF
Actual: 480 Pa
Setp.: 490 Pa →
```

Setpoint Pressure control Here, Actual and Setpoint values are displayed. This is a read-only menu. No settings can be made here.

```
Pressure contr. SAF
Setp 1/1: 490 Pa
Setp 1/2: 300 Pa
```

Submenu Setpoint values for normal speed (1/1) and reduced speed (1/2).

```
Outd. comp. setp.
-20 °C = -50 Pa
10 °C = 0 Pa
Act. Comp: -5 Pa →
```

Submenu Outdoor compensation. An outdoor temperature dependent compensation of the pressure setpoint value can be added. The compensation can be set for either the supply air fan alone or for both fans.

```
Comp.sens.:Roomtemp1
15 °C = 0 Pa
20 °C = 0 Pa
25 °C = 0 Pa
```

Submenu Extra compensation. A temperature dependent compensation similar to the one above but with selectable temperature source.

Flow control SAF. (There are also corresponding menus for EAF)

```
Flow control SAF
Actual: 1800 m3/h
Setp.: 2000 m3/h →
```

Setpoint Flow control. Here, Actual and Setpoint values are displayed. This is a read-only menu. No settings can be made here.

```
Flow control SAF
Setp 1/1: 2000 m3/h
Setp 1/2: 1000 m3/h
```

Submenu Setpoint values for normal speed (1/1) and reduced speed (1/2).

```
Outdoor comp. setp.
-15 °C = -200.0 m3/h
 10 °C = 0.0 m3/h
Act. comp: 0.0 m3/h→
```

Submenu Outdoor compensation. An outdoor temperature dependent compensation of the pressure setpoint value can be added. The compensation can be set for either the supply air fan alone or for both fans.

```
Comp.sens.:Roomtemp1
15 °C = 0 m3/h
20 °C = 0 m3/h
25 °C = 0 m3/h
```

Submenu Extra compensation. A temperature dependent compensation similar to the one above but with selectable temperature source.

Manual frequency control SAF. (There are also corresponding menus for EAF)

```
Frequency control
manual SAF
Output: 75% →
```

Setpoint Fixed output signal. Here, Actual and Setpoint values are displayed. This is a read-only menu. No settings can be made here.

```
Frequency control
manual SAF
Output 1/1: 75%
Output 1/2: 50%
```

Submenu Setpoint values for normal speed (1/1) and reduced speed (1/2).
The setpoint is set in % of the full output. 100 % = 10 V output signal.

```
Outdoor comp. outp.
-20 °C = -40 %
 10 °C = 0 %
Act. Comp: 0 % →
```

Submenu Outdoor compensation. An outdoor temperature dependent compensation of the pressure setpoint value can be added.

The compensation can be set for either the supply air fan alone or for both fans.

```
Comp.sens.:Roomtemp1
15 °C = 0 %
20 °C = 0 %
25 °C = 0 %
```

Submenu Extra compensation. A temperature dependent compensation similar to the one above but with selectable temperature source.

CO2 / VOC

```
CO2
Actual: 920ppm
Setp.: 1000pm
```

In applications with varying occupancy, the fan speed can be controlled by the air quality as measured by a CO₂/VOC-sensor.

Humidity control

This menu is only shown if humidity control has been configured.

Humidity sensor room

```
Humidity room
Actual: 51.9% RH
Setp.: 50.0% RH
```

Humidity control can be configured as either Humidification or Dehumidification or as combined Humidification/Dehumidification.

Humidity sensor duct

```
Humidity duct
Actual: 72.2% RH
Max.limit: 80.0% RH
Hyst.: 20.0% RH
```

A duct humidity sensor is only used for maximum limitation function.

Time settings

General

```
Time/Date
Timer Normal speed
Timer Reduced speed
Extended running
Timer output 1 →
Timer output 2 →
Timer output 3 →
Timer output 4 →
Timer output 5 →
Holidays →
```

Corrigo has a year-base clock function. This means that a week-schedule with holiday periods for a full year can be set.

The clock has an automatic summertime/wintertime change-over.

Individual schedules for each week-day plus a separate holiday setting. Up to 24 individual holiday periods can be configured. A holiday period can be anything from one day up to 365 days. Holiday schedules take precedence over other schedules.

Each day has up to two individual running periods. For two-speed fans and pressure controlled fans there are daily individual schedules for normal speed and reduced speed, each with up to two running periods.

Up to 5 digital outputs can be used as timer controlled outputs. Each with individual week-schedules with two activation periods per day. These outputs can be used to control lighting, doorlocks etc. Only outputs which have been configured will be shown.

Time/Date

```
Current time: 18:21
Date: 2009-06-10
Weekday: Wednesday
```

This menu shows and permits the setting of time and date.

Time is shown in 24-hour format.

Date is shown in the format YY-MM-DD.

Timer Normal speed

```
Normal speed
Monday
Per.1: 07:00 - 16:00
Per.2: 00:00 - 00:00
```

There are 8 separate setting menus, one for each weekday and one extra for holidays.

Holiday schedules take precedence over other schedules.

For 24 hour running, set a period to 0:00 – 24:00.

To inactivate a period, set the time to 00:00 – 00:00. If both periods of a day are set to 0:00 – 0:00, the unit will not run at normal speed that day.

```
Normal speed
Monday
Per.1: 07:00 - 16:00
Per.2: 22:00 - 24:00
```

If you want to run the unit from one day to another, e.g. from Mon 22:00 to Tue 09:00, the desired running time for the various days must be entered individually.

First Mon 22:00 – 24:00...

```
Normal speed
Tuesday
Per.1: 00:00 - 09:00
Per.2: 00:00 - 00:00
```

... then Tue 00:00 – 09:00.

Timer Reduced speed

```
Reduced speed
Sunday
Per.1: 10:00 - 16:00
Per.2: 00:00 - 00:00
```

These settings will be ignored if single speed fans are configured.

Should periods for normal speed and periods for reduced speed overlap, normal speed takes precedence.

There are 8 separate setting menus, one for each weekday and one extra for holidays. Holiday schedules take precedence over other schedules. For 24 hour running, set a period to 00:00 – 24:00. To disable a period, set it to 00:00 – 00:00. If both periods of a day are set to 00:00 – 00:00, the unit will not run at Reduced speed that day.

Extended running

```
Extended running
60 min
Time in ext. running
0 min
```

Digital inputs can be used to force the unit to start although the timer says the running mode should be “Off”.

For 2-speed fans and pressure/flow controlled fans, inputs for normal speed and reduced speed can normally be used.

The unit will run for the set time. If the running time is set to 0 the unit will only run as long as the digital input is closed.

Timer outputs 1...5

Up to 5 digital outputs can be used as timer controlled outputs. Only outputs which have been configured will be shown. Each with individual week-schedules with two activation periods per day.

```
Timer output 2
Wednesday
Per.1: 05:30 - 08:00
Per.2: 17:00 - 23:00
```

Each timer output has 8 separate setting menus, one for each weekday and one extra for holidays. Holiday schedules take precedence over other schedules.

If the function Recirculation has been configured, Timer output 5 can be used for controlling start/stop of the Recirculation function.

Holidays

```
Holidays (mm:dd)
1: 01-01 - 02-01
2: 09-04 - 12-04
3: 01-05 - 01-05
```

Up to 24 separate holiday periods for a full year can be set.

A holiday period can be any number of consecutive days from one and upwards. The dates are in the format: MM-DD

When the current date falls within a holiday period, the scheduler will use the settings for the weekday "Holiday".

Access rights

There are four different access levels, Normal level which has the lowest access and does not require logging on, Operator level, Service level and Admin level which has the highest access. The choice of access level determines which menus are shown, as well as which parameters can be changed in the displayed menus.

The basic level only permits changes in Running mode and gives read-only access to a limited number of menus.

Operator level gives access to all menus except Configuration.

Service level gives access to all menus except the submenus Configuration/In- and Outputs and Configuration/System.

Admin level gives full read/write access to all settings and parameters in all menus.

```
Log on
Log off
Change password
```

Repeatedly press down-arrow when the start-up display is shown until the arrow-marker to the left of the text-list points to Access rights. Press RIGHT.

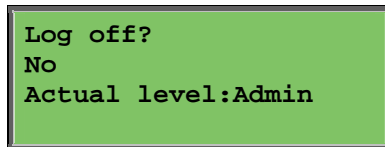
Log on

```
Log on
Enter password:****
Actual level: None
```

In this menu it is possible to log on to any access level by entering the appropriate 4-digit code. The log on menu will also be displayed should you try to gain access to a menu or try to do an operation requiring higher authority than you have.

Press the OK button and a cursor marker will appear at the first digit position. Repeatedly press the UP button until the correct digit is displayed. Press the RIGHT button to move to the next position. Repeat the procedure until all four digits are displayed. Then press OK to confirm. After a short while the text on the line: Present level will change to display the new log on level. Press the LEFT button to leave the menu.

Log off



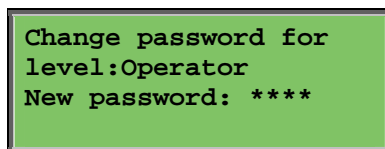
```
Log off?  
No  
Actual level:Admin
```

Use this menu to log off from the present level to the basic "no-log on" level.

Automatic logoff

If the access level is Operator, Service or Admin, the user will automatically be logged off to Normal after a settable time of inactivity. The time is settable.

Change password



```
Change password for  
level:Operator  
New password: ****
```

You can only change the password for access levels lower or equal to the presently active level.

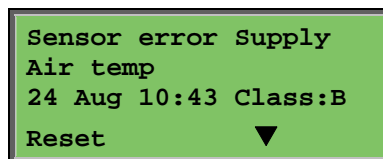
Other functions

Alarm handling

If an alarm condition occurs, the red alarm LED on the front panel of units with display or the alarm LED on a connected display unit will start flashing. The LED will continue to flash as long as there are unacknowledged alarms.

Alarms are logged in the alarm list. The list shows type of alarm, date and time for the alarm and the alarm class (A, B or C alarm).

To access the alarm list, press the alarm button, the front panel button with the red button-top.



```
Sensor error Supply
Air temp
24 Aug 10:43 Class:B
Reset
```

If there are multiple alarms, this is indicated by up / down arrow symbols at the right-hand edge of the display.

Use the UP and DOWN buttons to access the other alarms.

At the left end of the bottom display line the alarm status is shown. For active, unacknowledged alarms the space is blank. For alarms that have reset the text: Acknowledged, still active or blocked alarms are indicated by Acknowledged or Blocked.

Alarms are acknowledged by pressing the OK button. You are then given the choice of acknowledging the alarm or blocking the alarm.

Acknowledged alarms will remain on the alarm list until the alarm input signal resets.

Blocked alarms remain on the alarm list until the alarm has reset and the block has been removed. New alarms of the same type will not be activated as long as the block remains.

Since blocking alarms can be potentially hazardous, you need a high log on authority to block alarms.

Class A and B alarms will activate alarm output(s) if these have been configured.

Class C alarms do not activate the alarm output(s).

Class C alarms are removed from the alarm list when the alarm input resets even if the alarm has not been acknowledged.

Free text

If RIGHT is pressed once when the start-menu is shown, a menu showing text of your choice is displayed. The text can be used to show information concerning the commissioning company, name and phone number to service personnel etc. The easiest way to enter text is to use E tool, but the buttons can also be used. Up to 4 lines of 20 characters can be entered.

Revision numbers

If RIGHT is pressed twice when the start-menu is shown, a menu showing the program revision number and ID number is displayed.

Language



If RIGHT is pressed three times when the start-menu is shown, a menu is displayed in which the language can be changed.

The different language files are stored in the application memory and are downloaded to the work memory. If a Corrigo via E tool has been reloaded with a newer program revision than the factory revision, the controller will not allow language files to be downloaded from the application memory. This is because there is a risk that the language files are not compatible with the new revision. Therefore, you are limited to the two languages you have downloaded using E tool.

Indication LEDs

Status indication can be found in the upper left corner of the controller. For controllers with display, the alarm indication and change mode LEDs are located in the keypad area.

Status indication

Designation	Colour	Description
Tx	Green	Port 1, Transmitting
Rx	Green	Port 1, Receiving
Serv (-Lon models)	Yellow	Service LED LON, commissioning
LAN (-Web models)	Yellow/Green	Green: Connected to other network equipment Blinking green: Network traffic Blinking yellow: For identifying
P/B (Power/Battery)	Green/Red	Power on/Battery error
Controllers with built-in display:		
	Red	Alarm indication
	Yellow	Change mode

Changing the battery

Corrigo E has an internal battery to ensure the operation of the memory and real-time clock in the event of a power failure.

When the alarm "Internal Battery" is activated and the battery LED lights up red, the battery has become too weak and needs to be changed. Nonetheless, due to a backup capacitor, the controller will function at least 10 minutes without power supply.

Since changing the battery requires knowledge of proper ESD protection, as well as dismantling and opening of the unit, this should be handled by skilled service personnel.

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