
T2 ES/ T4 ES TURBINES

USER MANUAL



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User Manual CTR T ES

Intended use

The CTR T ES, including the CTR T2 ES and the larger CTR T4 ES, is the first digital turbine family developed and intended for construction drying and water damage restoration where the machines are used for suction and pressure drying in combination with adsorption dryers.

Through its control panel, the CTR T ES provides the user with the ability to set desired air flow, resettable energy and time counter as well as timer operation. Part of the new CTR ES family, the CTR T ES is also capable of networked operation and it is prepared for remote monitoring and control.

The unit has cable parking integrated with its foldable carrying handle and its low weight makes it easy to carry and install. Durable yet flexible feet protect floor surfaces while also allowing stacking of machines. The turbine is naturally as robust in its design as its predecessors, a prerequisite for a long service life. Thanks to the very low noise, it can be used for both construction drying and water damage restoration without the occupants having to evacuate.

Features:

• High Capacity	• Low weight – easy to carry and install
• Energy efficient	• Digital interface with networking capabilities
• Robust	• Variable speed and flow control
• Very low noise	• Energy and time meter – resettable work counter

Manufacturing Directive

CTR T2 ES and the CTR T4 ES are CE approved.

Waiver of Liability

- Faulty, incorrect installations and/or incorrect use can cause damage to property and human injury.
- The manufacturer assumes no responsibility or liability for damages or injuries caused by non-compliance with the instructions herein, use for other purposes than the intended, or failure to observe its warnings. Such damage, injuries or liabilities are not covered by the product warranty.
- The product warranty does not cover consumables or normal wear and tear.
- It is the responsibility of the buyer to inspect the product at time of delivery and before use to ensure its good function. The product warranty does not cover damage resulting from use of faulty products.
- Changes or modifications to the equipment must not be made without written consent by Corroventa Avfuktning AB.
- The product, technical data and/or installation and operation instructions can be changed without prior notice.
- This manual contains information that is protected by the Intellectual Property laws. No part of this manual may be copied, stored in an information system or transferred in any form or in any way without the written consent of Corroventa Avfuktning AB.

Any comments on the contents of this document shall be sent or addressed to:

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Safety information

This equipment can be used by children aged eight (8) years or above and people with reduced physical, sensory or mental capabilities or with lack of experience and knowledge provided they have been given instructions and information on how it is safely used and that they understand the hazards involved. Children must not be allowed to play with the equipment. Cleaning and maintenance must not be performed by children without supervision.

Electrical installations made in connection with the installation of the turbine shall be made by authorized personnel in accordance with local and national regulations.

Furthermore, the following warnings and instructions shall be read and observed:

1. The turbine is intended for indoor use only.
2. The turbine must not be powered until the installation is finished in accordance with this manual.
3. The powered turbine must not be covered as this can lead to overheating and fire hazard.
4. The turbine must not be used as table, trestle, pallet or stool.
5. The turbine must not be used to step or stand on.
6. Never use the turbine without the filter installed as this can cause damage to it. Ensure that the filter is clean. A cluttered filter can cause the turbine to overheat.
7. Oil, fat, solvents, boracol or similar substances must not be drawn into the turbine.
8. The turbine must not be used in spaces where explosive gases can be present.
9. Do not stick objects into the air outlets or intakes as this can cause damage to the machinery as well as human injury.
10. Install the turbine steadily and leveled so that it cannot fall over.
11. Keep children, animals and spectators away from the work place while installation is undertaken.
12. If the turbine is broken, if the power connector or the cable is damaged, contact the retailer. Do not repair the equipment if you have not received specific training by the manufacturer.
13. Be careful not to damage the power cable. The cable must not go through water or pass sharp edges.
14. Never carry or tow the turbine by its cable.
15. To use electrical equipment in humid or wet environment can be dangerous. Never power the turbine if it is standing in water.
16. The dryer must only be connected to grounded power outlet with voltage and frequency in accordance with turbine nameplate.
17. A residual-current device / ground fault circuit interrupter should be used to minimize the risk of electric shocks.
18. Water must not come in contact with the electrical components of the equipment. If this has happened, ensure that the equipment is dry before it is used again.
19. The power must always be disconnected before the turbine is opened.
20. Air hoses/pipes that are used with the turbine must be corrosion-resistant, able to withstand 80°C heat and have sufficient structural strength not to collapse or break from the under- and overpressures generated.
21. Repairs and maintenance of the electronics and the electrical system of the turbine must only be made by qualified electrician.
22. The turbine must never be used with any other accessories than those listed in this manual or those specifically approved by Corroventa Avfuktning AB.
23. When used with Corroventa water separator, the turbine must always be powered through the power outlet of the water separator.

For further advice on product safety and use, please contact the supplier.

Relative humidity and its effect on substances

All air contains more or less moisture but the naked eye cannot see it until it condenses in small droplets on for instance a metal or glass surface. Already before it is visible however, the moisture affects substances and production processes, causes corrosion and micro organism growth.

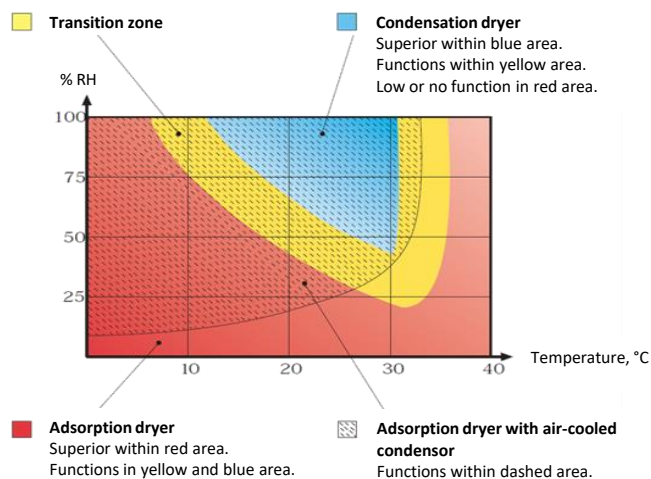
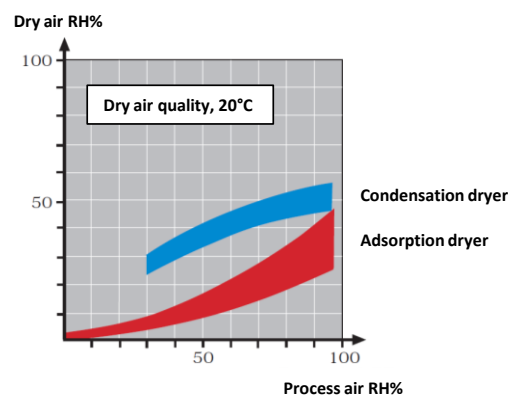
Air humidity is measured and referred to in terms of relative humidity (%RH) which is a measure how much water it contains relative how much it can contain at given temperature and pressure. The higher the temperature, the more water the air can contain but it is still the Relative Humidity that is important and that needs to be controlled if one wants to prevent corrosion or mould growth.

At RH 100% the air is saturated – there is fog and the moisture condensates in small droplets. Already at RH 60% steel corrodes and at 70% there is a risk for mould growth. As a rule of thumb, RH 50% is a good climate for most substances.

How to select dryer type

The adsorption principal has, compared to condensation drying, the advantage of a lower ambient temperature dependency. Adsorption functions even well below the freezing point while the capacity of a condensation dryer inevitably decreases rapidly with falling temperature, something that is depicted in the diagram below to the left.

As a rule of thumb, a general aid in the selection of type, it can be said that adsorption is the primary choice for drying of unheated spaces or when material is to be dried. The latter is motivated by the fact that the adsorption dryer produces dryer air, generates a greater reduction of water content measured in grams per kilogram (Δx), easily deduced from the diagram below to the right and something that is directly correlated to the drying speed. Drying of layered constructions such as floor structures are, with advantage, dried with combined use of turbines, high pressure fans, installed for either suction or pressure drying.



Condensation dryers are, in accordance with the diagram above, used in hot and humid conditions provided the goal and aim is drying of rooms, ambient air.

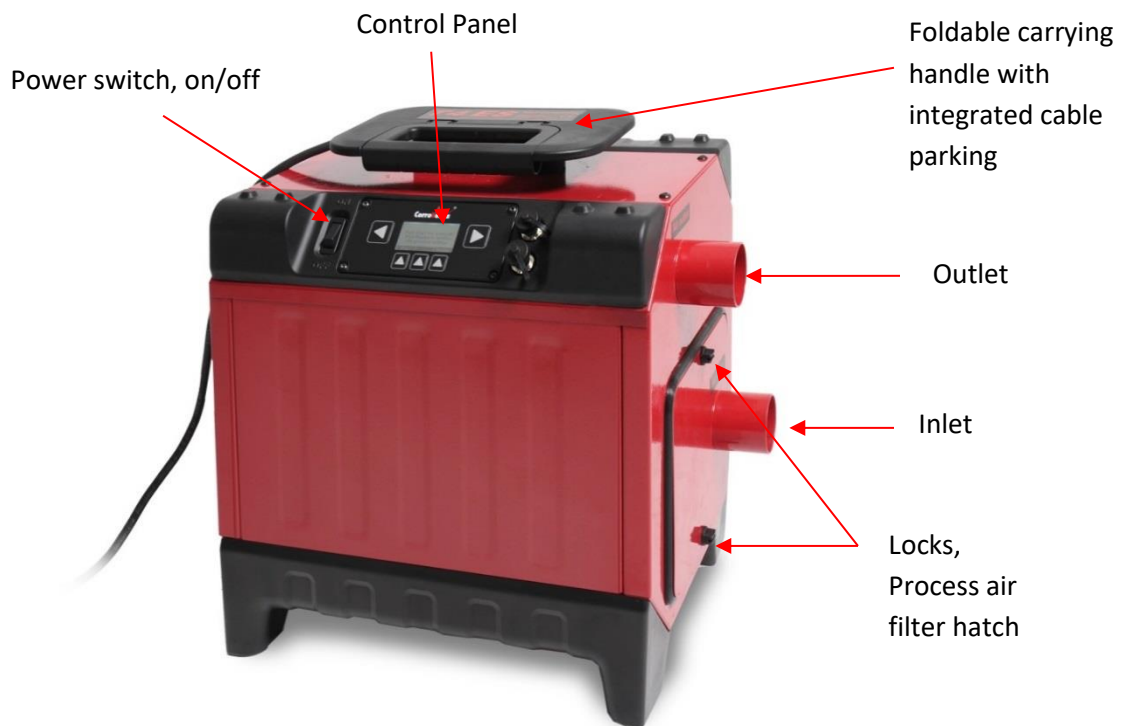
Delivery inspection

CTR T ES is delivered with the following items included:

Turbine CTR T ES	1 pc
Spare cooling air filters	4 pcs
Manual	1 pc

Product Overview

Below pictures present CTR T ES with all its external features and controls. The CTR T2 ES is shorter than the CTR T4 ES but all the external features are the same.



Drying methods

The turbine CTR T ES is, in combination with adsorption dryer, used for suction and pressure drying. The reason for the use of an adsorption dryer is that both suction and pressure drying are all about drying material and the speed of that process is dependant of the difference in water contents (Δx), measured in grams per kilogram, between the material and its environment. Adsorption dryers produce dryer air, generates a greater reduction of water contents measured in grams per kilogram) which increases the speed of the drying process. With pressure drying, warm and dry air is pressed down into the construction making the construction temperature rise which increases the speed even further and is the reason for it being faster than suction drying.

Suction drying

For suction drying the turbine is installed so that it draws air from the construction through hose, water separator and filter and then evacuates this, normally outdoors. Use of water separator is critical to prevent water from being sucked into the turbine and damage its motor.

The dryer is installed for normal drying of room.



Suction drying. The dryer dries the ambient air and the turbine draws and evacuates air from the construction. The resulting underpressure in the construction draws dry air into it.

Pressure drying

For pressure drying, the turbine is installed so that it is fed with dry air from the dryer and then presses this down into the construction. This makes the construction temperature rise and the drying goes faster. Wet and cooled air leaks into the room through drilled holes or gaps between the floor and the walls and then returns to the dryer as process air.



Pressure drying. The turbine is fed with dry air from the dehumidifier and presses this air into the layered construction.

Before pressure drying is applied, suction drying shall be used to remove any free water from the construction and thus avoid pushing this into other parts of the building. The initial removal of free water also saves time.

Pressure drying might free particles/fibers from the construction and thus release them in the air. If this is a potential problem, another method should be applied.

Installation

The CTR T ES shall be placed and installed leveled and in a stable position so that it does not fall over and cause damage to the machine itself, person or property.

For suction drying, a water separator shall be used and connected to the hose prior to the turbine so that water is not sucked into the turbine as that will damage the motor.

For pressure drying it is important to verify that the capacity of the turbine does not exceed that of the dryer, that the latter's dry air volume matches the turbine's throughput. If not, too much air will be drawn through the dryer and its capacity will decrease dramatically. If using a CTR ES version dryer, this is verified by observing that the wet air volume is correct. When using one of these machines, there is also the possibility of networking them, using the turbine as Master, and setting the slaved adsorption dryer to pressure drying mode. In this mode, the dryer will automatically adjust to the air volume that the turbine is pushing.

Verify that the cooling air filter is clean and not clogged by dirt. If required, replace the filter before the work is commenced.

Contrary to its predecessors, the CTR T ES is not equipped with a manually resettable overheating protection as this no longer is necessary. The turbine provides itself with cooling air and prevents overheating by automatically adjusting its speed if the temperature should still rise too high. For best drying performance, the user should however still verify that the airflow through the construction to be dried is correct.

Installation in short, main points:

1. Put the turbine in a leveled and stable position so that it does not fall over and cause damage.
2. Check the process air filter and the cooling air filters and replace them if necessary. Connect the hoses configured for the drying to be undertaken. If free water might be present in the construction to be dried, use Water separator to prevent water from being sucked into the turbine.
3. Connect the cable to a 1-phase, 230 VAC socket with a 10A or maximum 16A fuse. As the machine is normally used in humid or wet spaces, the use of a ground fault circuit interrupter is strongly recommended.
4. Put the power switch in position On. When the display has started up, for new job with default settings, push Start. To operate with the same settings as last time the machine was used, push Resume.
5. Adjust the speed until desired air flow is obtained.

Accessories and consumables

The following articles are available as accessories and consumables to the CTR T ES:

Article number	Name
1001238	Cooling air filter
6000371	Process Air filter
1002749	System cable, 0.5m
1002748	System cable, 5m

To Use CTR T ES, menus and operation

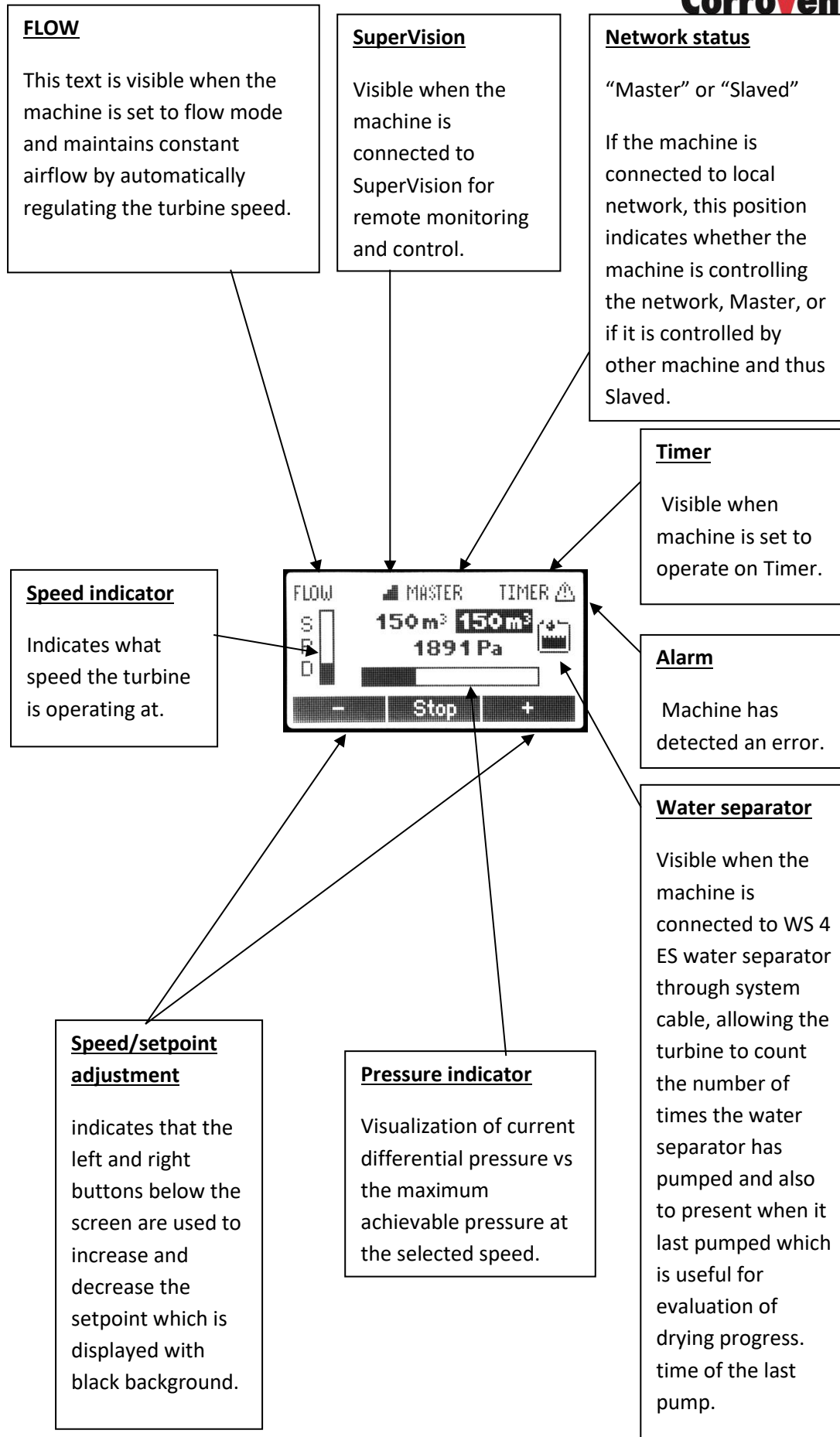
The CTR T ES has an easily understood user interface with a display and five push buttons. The two larger buttons on the respective sides of the display are used to select between the different menus – no changes to the setup can ever be made with these buttons as they are for navigation only.

The three smaller buttons below the display are used for selection and editing. At the top level menus, the left of these buttons is named Home and a push on this button will immediately lead back to the default view, something that can be good to remember if unfamiliar with the menu system. In many of the views there is an Info button which presents information that may be of use to the inexperienced user.

If the backlight of the display has timed out, the first button push serves only to light up the display.

After 10 minutes, if no button is pushed, a key pad lock is activated. The machine is then unlocked by simultaneous push of the two upper buttons, something that is presented in text as well as picture on the display.

Top left and right buttons –	Menu navigation only. Never changes any settings.
Home button	Return to the default view
Info button	Presents information. On-board manual



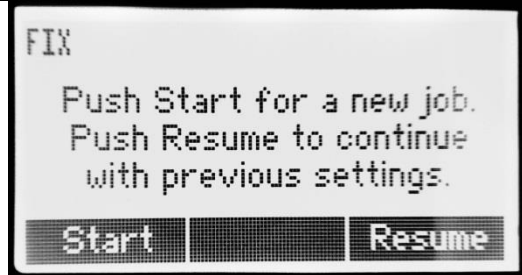
Start up view

When the T ES starts up, the display presents the user with two options:

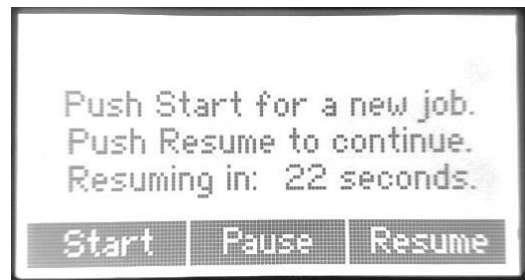
Start: Starts the machine at default speed. Previous settings made such as Timer and Flow settings are discarded.

Resume: The machine resumes operation with the settings it had last time it was used.

If, last time it was used, the user never pushed stop before the power was cut, the machine will automatically resume operation when the countdown has reached zero.



Normal start



Start med timer

Default View

When the T ES is operating, the machine can always be stopped, set to standby, by use of the center button below the display.

When the Turbine is operating on fixed speed, the left and right buttons below the display are used to decrease and increase the speed level. The current speed level is depicted on the vertical bar to the left.

The horizontal indicator presents the current pressure level compared to the maximum pressure achievable for the given turbine speed.

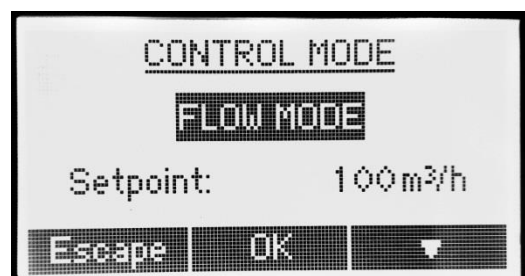
When set to flow mode, the left and right buttons below the display changes the setpoint flow, highlighted with black background. The same principal applies to Relation mode which can be used when the machine is used in a network and slaved to another Turbine.



Control Mode

The machine can operate in three different control modes, Fix, Flow and Relation. In Fix mode, the user selects a fixed speed level for the turbine. In Flow mode, the user instead selects what air flow shall be maintained and the machine will then automatically adjust the turbine speed to maintain that airflow even if the counter pressure changes.

The third option, Relation, is only available when the machine is networked and slaved to another turbine.



The Relation mode functions like the Flow mode, the only difference being that instead of defining a certain air flow, the user selects what percentage of the Master machine's air flow the turbine should maintain.

To select Control Mode, push Change and then use the right down arrow button to select mode. Push OK to confirm the selection. In the next step, adjust setpoint as required.

The current Control Mode is displayed in the top left corner of the default screen.



Water Separator

Note: This functionality can only be used when the turbine is connected to a WS4 ES Water Separator.

If the turbine is connected by power cable and by system cable to a WS 4ES, the turbine can register how many times the water separator is emptied so as to allow the user to calculate how much water has been removed. In addition, the turbine can also present at what date and time the water separator was last emptied in order for the user to assess whether or not there is any more water to be removed.

If this functionality is activated there when there is no WS 4ES connected, the turbine will remain in standby.



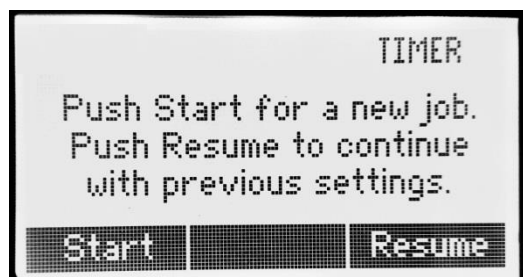
Timer - on/off and quiet mode






If, for some reason, the machine must not operate continuously but for instance only day time or night time, the machine can be set to operate on Timer. For the remainder of the time, the machine can be set to turn off completely or to operate in quiet mode. In quiet mode, the speed of the turbine is reduced to approximately level 4 in order to minimize noise.

When Timer is selected, the word Timer is displayed in the upper right corner of the default screen.

To activate Timer, enter the Timer menu and push Activate.

Confirm or, if required, edit the system time and date which is presented in the following format:
YY:MM:DD / HH:MM.



<p>Push OK.</p> <p>The Timer function is now activated with the settings presented. If the settings are incorrect, push Edit and use down and up arrows to change the settings. Confirm each selection with the push of Next.</p> <p>The last parameter, Outside int, controls what the machine shall the remaining time, outside the interval. It can be set to either Quiet Mode, in which the machine operates at reduced speed, or Off where naturally the machine will stop and remain in standby until it restarts at selected start time.</p>	 
<p>Network</p> <p>Note: Install all the system cables before powering up the machines.</p> <p>To use this machine as a Master on local network, in the Network menu, push Create. The creation can take up to one minute.</p> <p>When the creation process is through, a slave selection menu is presented. If there is no need to change the settings on any of the slaves, push Escape.</p> <p>If changes are required, push Select and use the left and right arrow buttons to choose the machine to edit. When selecting a slave, its display backlight will start blinking as an acknowledgement to the user.</p>	 
<p>Setup and Maintenance Menus</p> <p>Under Setup and Maintenance, functions that are not required for normal operation are found.</p> <p>Date and Time: Setting of system date and time. Format is YY:MM:DD / HH:MM.</p> <p>Language: Selection of language for the interface.</p> <p>Menu System: The menu system is by default set to Advanced with all functions visible and accessible. If set to Basic, the more advanced functions, flow are removed from the menu system.</p> <p>Key Pad lock: Possibility to deactivate the key pad lock.</p>	

Run built-in test: A built-in self-test that is available for service technicians.

Reset Service Time: The machine is set to give a service reminder once every 12 months. When service has been performed, this service reminder can be reset using this function.

Pressure sensor zeroing: Functionality allowing zeroing of pressure sensor to eliminate drift that can occur over time. Must only be used when the machine is stand-alone, not connected by hoses to any other machine and also with clean process air filter.

View sensor data: Functionality intended for service technicians.

Date/Time: 15:04:29 / 11:03
Language: English
Menu system: Advanced
Keypad lock: No

Exit Change ▼

Run built-in test
Reset service time
Pressure sensor zeroing
View sensor data

Exit Change ▼

Counters

This screen presents the hour and energy counters. At the top, the resettable work counters are presented, followed by the date at which the counters were reset. After the date, the number of hours elapsed since this reset is presented so as to allow for a quick comparison.

To reset the work counters, push Reset. Acknowledge the intent to reset the counters by push of OK in the following confirmation screen.

At the bottom, the machine life time counters for energy and hours are presented. These counters are not resettable.

With machines that have MID energy meters, the energy lifetime counter is removed from this screen and presented in the MID Energy meter menu.

COUNTERS

0 kWh/ 11 h
Rst: 14:04:28 (8778 h)

0 kWh/ 11 h

Home Info Reset

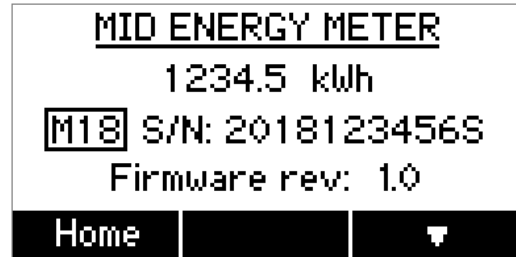
Press OK to reset
counter started:

14:04:28 / 16:37

OK Escape

MID Energy Meter

This menu presents the total, accumulated energy consumption.
For more information, please refer to chapter MID Energy Meter.



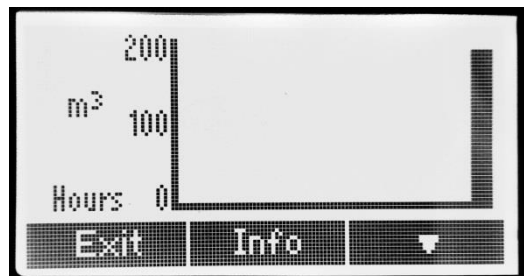
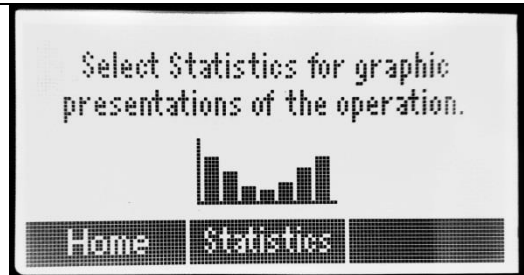
Statistics

Statistics are provided to assist the user in studying the progress of the drying process and to allow for monitoring and follow-up of the operation of the machine.

Found under the statistics menu are the following graphs:

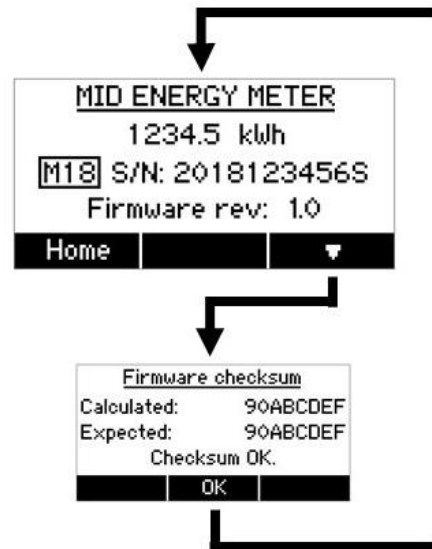
- Average air volume for the duration of operation during the last 12 hours and for the last 14 days respectively.
- Operation hours for the last 14 days
- Consumed energy, kWhrs, for the last 14 days.

The last value, the bar at the far right in the respective graphs, is the current hour or current day as applicable.



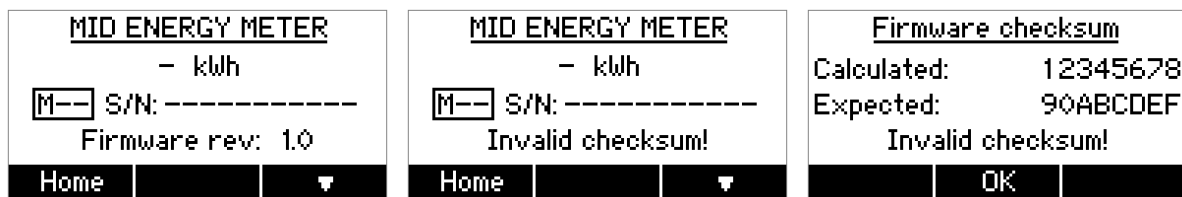
Mid energy meter menu

Part of the main menu loop and accessible with either of the navigation keys, the MID Energy Meter menu presents the total, accumulated energy consumption. The affixing, M18 in the example below, as well as the serial number that follows is information on the built-in CEMP energy meter. The revision number given at the bottom row refers to the legally relevant firmware within the machine.



The integrity of the data presented with this menu is thoroughly checked and protected. One such important test is the calculation of a checksum to verify that the program memory has not been corrupted. The result of the latest calculation is always available with the Firmware checksum screen, accessed through the MID Energy Meter menu with the lower right button.

If any of the tests fail and the machine concludes that the available energy meter data must not be trusted, the information is removed from the screen and replaced with dashes. If the problem detected has to do with the checksum calculation, the bottom row of the screen will say so.



Left: Data removed due to communication error
 Centre: Data removed due to checksum error
 Right: Appearance of Firmware checksum screen when error is detected.

Network functions

As a member of the new CTR ES family of machines, the T ES can be networked with other turbines and adsorption dryers which provides extended functionality including:

- Relation – cooperation between two or more turbines with defined relation between the respective air flows.
- Optimized pressure drying, a mode of operation where the slaved adsorption dryer automatically adjusts to the turbine air flow producing as dry air as possible.
- Operation on common timer
- Interoperability with future SuperVision system allowing remote monitoring and control of machine operation.

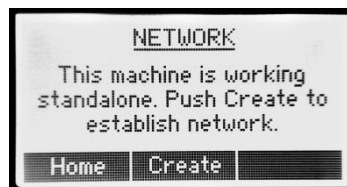
The networking of machines requires no pre-configuration or other preparations. When installed, the machines are simply connected with system cables and then a simple push of the Create button in the Network menu of the intended Master machine is all that is required. The Master is the machine selected to control the others and all machines can be used to this purpose. For use of Relation and Pressure drying modes, the Master needs to be a turbine but for other purposes it does not matter what machine is Master on the network.

While a machine is slaved to another unit, its settings can still be changed on the machine itself and not only through the Master. If the user selects to do necessary changes to the settings through the Master, the display of the selected Slave flashes while the changes are made so as to allow for easy identification and avoid confusion.

How to network machines

In order to network machines to use for instance the pressure drying mode of the dehumidifier, proceed as follows:

1. If the machines are powered, switch them off and then proceed by connecting the machines with system cables. The two connectors on the machines have the same functionality so it does not matter which one is used. If SuperVision is to be used, this too must be connected to one of the machines, it does not matter which one.
2. Power up the machines.
3. Select what machine shall be master, for use of pressure drying mode, this shall be the Turbine set to push the dry air into the construction.
If networking the units with the only purpose of having them monitored and remotely operated through SuperVision, it does not matter what machine is selected as Master.
4. On the selected Master machine, use right arrow button to step to the Network menu depicted below.



(If this menu is not found, the machine is set to Basic menu setting. To change this, select Setup and Maintenance menu and change the menu system setting to Advanced.)

5. In the Network menu, push <Create> and then wait while the machine sets up the network.
6. When the network is created, at the top of the screen the presentation will toggle between the different slaves. If SuperVision is connected, the text SuperVision will be presented at the bottom of the screen although it can take up to a minute before this is shown.

After having followed the steps above, all the slave machines are now controlled by the Master. This means that they will all be started and stopped with the Master. They still work with the same settings they had before the network connection so if these need to be changed, push Edit and then select the slave to be edited through the Master or do the necessary changes to the settings on the machine itself. When being edited through the Master, the slave machine will start to blink its display backlight so that the user can see what machine is selected.

Alarms

If the machine detects an error, this information is presented in a pop-up screen and for as long as one or more problems exist, there is a warning symbol in the top right corner of the default view.

The alarms that can be displayed are the following, each presented with recommendation on what to do.

Alarm	Action / Advice
One or more slaves are not responding	This alarm is presented when the machine, used as Master on a network, has lost connection with one or more of its slave machines. If it is presented, check all the system cables and the power to the respective machines. As soon as communication is re-established, the alarm will automatically disappear.
Water separator pumping time limit	This alarm can be displayed when the turbine is used with a WS4 ES water separator. If displayed, check the water separator to see why the pump has not succeeded in emptying the machine.
Air flow is too low	If displayed the turbine is running with too much counterpressure. Check the installation.
Mainboard connection failure	Internal error. If it remains, please contact service technician.
Pressure sensor failure	Internal error. If it remains, please contact service technician.
Failed to save the statistics	Internal error. If it remains, please contact service technician.
Failed to save the event log	Internal error. If it remains, please contact service technician.

Service Reminder

The machine is set to provide a service reminder every twelve months. The reminder is presented as an alarm but it does not affect the operation of the machine. The service reminder function is reset under Setup and Maintenance.



Maintenance and service

The turbine's air filter shall be replaced regularly, suitably between every installation, every work, that the dehumidifier is used for. When used in dirty environment, the filter needs to be replaced more often.

1. Disconnect power to the turbine - remove its cable from the socket.
2. Turn the knobs of the filter hatch anti-clockwise to open it. Pull out the dirty filter and insert the replacement filter. Close the hatch by turning the knobs clockwise.
3. Reconnect power.

The cooling air filters shall be replaced regularly, suitably for each new job. In very dirty environments even more frequent replacements can be necessary.

4. Turn the knob anti-clockwise to remove the filter holder.
5. Remove and discard the old filters, install the new ones.
6. Put the filter holder back in position.

Turn knob anti-clockwise to remove filter holder.



Fault finding

Symptom	Probable cause	Action
Turbine speed varies, it shuts down and restarts again	The turbine is too heavily loaded, the resistance through the construction or the hoses is too high due to too few suction/pressure points, squeezed or clogged hoses, and/or clogged filter.	<p>Inspect the installation and all filters, both that of the turbine itself and the others in the system. Verify that they are clean and are not stopping the flow. Verify that no hoses are squeezed or clogged with dirt.</p> <p>Make and install additional suction or pressure points depending on installation. Drill further holes and connect additional hoses or whatever is appropriate and feasible to decrease the resistance and increase the flow.</p>
The turbine makes noise, does not sound the way it normally does.	Bearing in motor is worn and/or damaged.	Please contact your retailer for repair.
	b	
The turbine has stopped/ does not start.	<p>No mains power.</p> <p>Built-in overheating protection triggered.</p> <p>Turbine failure.</p>	<p>Check that power cable is connected and that the power outlet is live, that the fuse and, if present, the ground fault circuit breaker are in order.</p> <p>Disconnect power by pulling the cable from the socket and let the turbine cool down for 15 minutes. Reconnect the power and start the turbine.</p> <p>If the above does not rectify the operation, please contact your retailer for repair.</p>

Technical data

CTR T2 ES

Air volume (m ³ /h)	Up to 180 (continuously variable)
Pressure (mbar)	Up to 260 (continuously variable)
Noise, dBA (3m)	approx. 48 *
Voltage	230 VAC / 50 Hz
Rated power (W)	1100
Height x width x length (mm)	430 x 295 x 370
Weight, kg	14

*Noise level varies with installation.

CTR T4 ES

Air volume (m ³ /h)	Up to 300 (continuously variable)
Pressure (mbar)	Up to 260 (continuously variable)
Noise, dBA (3m)	approx. 48 *
Voltage	230 VAC / 50 Hz
Rated power (W)	1800
Height x width x length (mm)	430 x 295 x 430
Weight, kg	17,5

*Noise level varies with installation.

CEMP ENERGY METERING DATA

NOTE: The below data, temperatures and current levels etc., relate to the built-in energy metering function, the CEMP, alone and not to the complete machine.

The CEMP declaration of conformity is available at www.corroventa.com/mid-certificate/.

Accuracy class	Class B
Rated Operating conditions	
Voltage	230VAC
Frequency	50Hz
Power factor	0.5ind. to 0.8cap.
Current	
I st	0.02A
I min	0.25A
I tr	0.5A
I ref	5A
I max	45A
Operating temperature	-25°C to + 55°C
Climate	Non-condensing
Environment/position	Closed location
Electromagnetic environment class	E2
Mechanical environment class	M2
Max capacity of energy register	9 999 999,9 kWh
Notified body	0402



DO YOU HAVE QUESTIONS OR NEED HELP?

*Visit www.corroventa.com or call us to speak with an expert.
We have the knowledge and the equipment to find a solution as efficiently as possible.*

Corroventa develops, manufactures, sells and rents high quality products for dealing with water damage, moisture, odours and radon. We are one of the market leaders and specialists in innovation within the industry. Our products are compact, effective, ergonomic and energy efficient. In emergency situations and during flooding, Corroventa's customers have access to one of the largest rental parks in Europe. All our products are manufactured in Bankeryd, Sweden.

www.corroventa.com



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