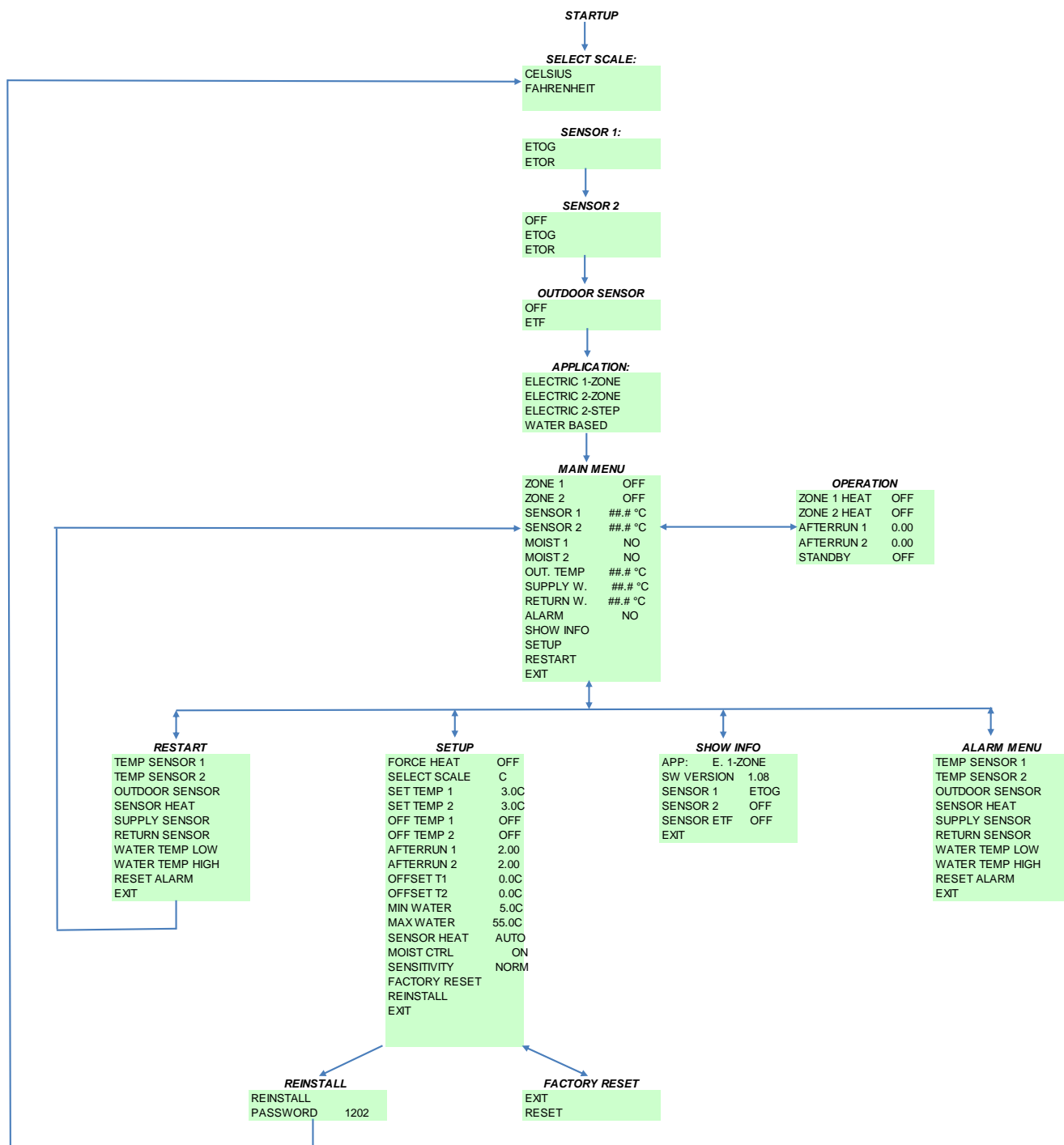


Menu overview, ETOG-version 1.08



TEST_APP-FHEL-001v100_ETO2_Menu_overview.docx

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ETO2

SELECT SCALE:

CELSIUS
FAHRENHEIT

When ETO2 is switched on for the first time, Celsius or Fahrenheit must be selected. Turn the encoder button until the required temperature scale is highlighted. Then OK the selection by pressing the encoder button.

SENSOR 1:

ETOG
ETOR

SENSOR 1 is shown on the display, allowing the type of sensor connected for input 1 to be selected:

ETOG : Ground sensor
ETOR : Gutter sensor + outdoor sensor

Then OK the selection by pressing the encoder button.

SENSOR 2

OFF
ETOG
ETOR

SENSOR 2 is then shown on the display, allowing the type of sensor connected for input 2 to be selected.

If none sensor is connected for input 2, OFF must be selected.

OUTDOOR SENSOR

OFF
ETF

Select if outdoor sensor ETF is connected terminals 31-32.

If none sensor ETF is connected, OFF must be selected. Press encoder button for OK.

APPLICATION:

ELECTRIC 1-ZONE
ELECTRIC 2-ZONE
ELECTRIC 2-STEP
WATER BASED

Select the application type by turning the encoder button and pressing OK.

ELECTRIC 1-ZONE : 1 zone electric heating control/simple waterbased.

ELECTRIC 2-ZONE : 2 zones individual electrical heating control/simple waterbased.

ELECTRIC 2-STEP : Advanced 2-stage electric heating control (Y/Δ) for 1 zone.

WATERBASED : 1 zone waterbased heating control with supply water control.

MAIN MENU

ZONE 1 OFF
ZONE 2 OFF
SENSOR 1 ##.# °C
SENSOR 2 ##.# °C
MOIST 1 NO
MOIST 2 NO
OUT. TEMP ##.# °C
SUPPLY W. ##.# °C
RETURN W. ##.# °C
ALARM NO
SHOW INFO
SETUP
RESTART
EXIT

ZONE 1 OFF Heating zone 1 active (ON) or inactive (OFF)

ZONE 2 OFF Heating zone 2 active (ON) or inactive (OFF)

SENSOR 1 ##.#°C Sensor 1 (heated sensor) core temperature. Applies only when ETOG sensor is connected. NOTE: Not ambient temperature!

SENSOR 2 ##.#°C Sensor 2 (heated sensor) core temperature. Applies only when ETOG sensor is connected. NOTE: Not ambient temperature!

MOIST 1 NO Sensor 1 moisture status. YES / NO / Blank. Blank will be shown if temperature is above Set Temp or the system is in Afterrun mode.

MOIST 2 NO Sensor 2 moisture status. YES / NO / Blank. Blank will be shown if temperature is above Set Temp or the system is in Afterrun mode.

OUT TEMP ##.#°C Ambient outdoor temperature. Applies only when ETF sensor is connected.

SUPPLY W. ##.#°C Supply water temperature, only waterbased application

RETURN W. ##.#°C Return water temperature, only waterbased application

ALARM NO Fault message, fault type will be displayed. Red LED on front of unit will flash.

OPERATION

ZONE 1 HEAT OFF
ZONE 2 HEAT OFF
AFTERRUN 1 0.00
AFTERRUN 2 0.00
STANDBY OFF

ETO2 is equipped with an easily operated encoder button (turn and press) and a display which describes the current situation. The display is backlit and is illuminated by pressing the encoder button (OK). The illumination is automatically switched off after 30 seconds.

Press the encoder button and the main menu will be shown on the display.

SETUP

FORCE HEAT	OFF
SELECT SCALE	C
SET TEMP 1	3.0C
SET TEMP 2	3.0C
OFF TEMP 1	OFF
OFF TEMP 2	OFF
AFTERRUN 1	2.00
AFTERRUN 2	2.00
OFFSET T1	0.0C
OFFSET T2	0.0C
MIN WATER	5.0C
MAX WATER	55.0C
SENSOR HEAT	AUTO
MOIST CTRL	ON
SENSITIVITY	NORM
FACTORY RESET	
REINSTALL	
EXT	

FORCE HEAT OFF	Manual start of forced heat. Press OK and select ON to start Forced heat. ETO2 controller will heat in the pre-programmed afterrun time, see AFTERRUN 1 and 2.
SELECT SCALE C	Whether temperature is to be displayed in Celsius (C) or Fahrenheit (F) can be selected here. Select the required scale and press OK. Press OK to return to the SETUP menu.
SET TEMP 1 3.0C	Set temperature for Zone 1: The temperature at which the ice and snow melting system will become active can be set here. The temperature setting can be adjusted from +50 / -20°C (122 / -4°F). Set the required temperature and press OK.
SET TEMP 2 3.0C	Set temperature for Zone 2: The temperature at which the ice and snow melting system will become active can be set here. The temperature setting can be adjusted from +50 / -20°C (122 / -4°F). Set the required temperature and press OK.
OFF TEMP 1 OFF	The lowest operating temperature for Zone 1 can be set here. Below this temperature, the system will enter standby mode. The adjustment range goes down to -20°C/OFF (-3.9°F/OFF). OFF = no limit. To change the minimum cut-off temperature, press OK, turn the encoder button to the desired value and confirm with OK.
OFF TEMP 2 OFF	The lowest operating temperature for Zone 2 can be set here. The adjustment range goes down to -20°C/OFF (-3.9°F/OFF). OFF = no limit. To change the minimum cut-off temperature, press OK, turn the encoder button to the desired value and confirm with OK.
AFTERRUN 1 2:00	Afterrun time Zone 1 : An afterheat duration of between 0 and 18 hours can be set here. The system will continue to provide heat for the specified time after the moisture/temperature signal has been eliminated by a heating cycle. Use the encoder button to set the required afterrun time and press OK.
AFTERRUN 2 2:00	Afterrun time Zone 2 : An afterheat duration of between 0 and 18 hours can be set here. Use the encoder button to set the required afterrun time and press OK.
OFFSET T1 0.0C	Zone 1 temperature can be calibrated here. With ETOG-55 sensor, the temperature shown on the ETO2 display is always the core temperature of the sensor. For calibration, please see page 13.
OFFSET T2 0.0C	Zone 2 temperature can be calibrated here. With ETOG-55 sensor, the temperature shown on the ETO2 display is always the core temperature of the sensor. For calibration, please see page 13.
OFFSET OUT. 0.0C	Outdoor temperature can be calibrated here. The temperature, recorded by the ETF outdoor sensor, can be adjusted so that the exact temperature is displayed on ETO2. Measure the temperature beside the sensor using a thermometer. Adjust the necessary offset using the encoder button. Press OK.
MIN WATER 5.0C	The minimum return water temperature can be set here. Set the required minimum temperature and press OK. This menu option is only available when water-based heating is used.
MAX WATER 55.0C	The maximum supply water temperature can be set here. Set the required maximum temperature and press OK. This menu option is only available when water-based heating is used.
SENSOR HEAT AUTO	In auto mode, sensor heating is switched off during periods when snow melting is active. In special options or extreme cold weather the sensor heat can be selected on continuously. Select ON and press OK.
MOIST CTRL ON	The moist control on sensor can be switched off here. The thermostat will only control snow and ice melting after the set temperature, see SET TEMP. Select OFF for switching off the moist control and press OK.
Note that energy consumption/costs will rise with lacking moisture control.	
SENSITIVITY NORM	Sensor sensitivity can be adjusted in 5 steps: MIN - LOW - NORM - HIGH - MAX. To change sensitivity, press OK, turn the encoder button to the desired setting and confirm with OK.
FACTORY RESET	All ETO2 factory settings can be restored here. Selecting this option deletes all customised settings.
REINSTALL	Whether setup failure in startup menu, or new hardware connection has been done, The primare setup must be changed in STARTUP menu. Select PASSWORD and turn the encoder button to the factory code (1202) The controller will then return to the startup menu, see STARTUP.
REINSTALL PASSWORD XXXX	
EXIT	Select this option and press OK to return to the main menu.

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RESTART

TEMP SENSOR 1
 TEMP SENSOR 2
 OUTDOOR SENSOR
 SENSOR HEAT
 SUPPLY SENSOR
 RETURN SENSOR
 WATER TEMP LOW
 WATER TEMP HIGH
 RESET ALARM
 EXIT

When changing the settings or require a new process start, the ETO2 can be restarted in this menu.

RESTART

Restart operation. Keeping your current settings. The ETO2 will go to the initial status display.

ALARM MENU

TEMP SENSOR 1
 TEMP SENSOR 2
 OUTDOOR SENSOR
 SENSOR HEAT
 SUPPLY SENSOR
 RETURN SENSOR
 WATER TEMP LOW
 WATER TEMP HIGH
 RESET ALARM
 EXIT

"TEMP SENSOR 1" - Temperature sensor in ground or roof sensor 1 defective.

"TEMP SENSOR 2" - Temperature sensor in ground or roof sensor 1 defective.

"OUTDOOR SENSOR" - Outdoor sensor defective.

"SENSOR HEATER" - Short circuit of heating element in ground or roof sensor.

"SUPPLY SENSOR" - Supply sensor defective

"RETURN SENSOR" - Return sensor defective.

"RETURN TEMP LOW" - Water temperature on return pipe is too low.

"SUPPLY TEMP HIGH" - Water temperature on supply pipe is too high.

"FROST PROTECT" - Active frost protection due to low return temperature (waterbased systems only)

SHOW INFO

APP: E. 1-ZONE
 SW VERSION 1.08
 SENSOR 1 ETOG
 SENSOR 2 OFF
 SENSOR ETF OFF
 EXIT

By errors in the snow melting system, it is recommendable to check the setup of the ETO2. Activate the menu by pressing the adjustment knob, press SHOW INFO and readout the programmed application. By errors in the setup, activate REINSTALL with factory code 1202.

Check that all connections are placed correctly, and that cables are fastened in the clamps.

For more information on FAQ, see our website <http://www.ojelectronics.com/FAQ-Snowmelting-4040.aspx>

Please note, this document is only done for a start-up help made for ver. 1.08 (specific request for a new customer) it will not be updated regularly.

Please read the latest User Manual for details and updated information.