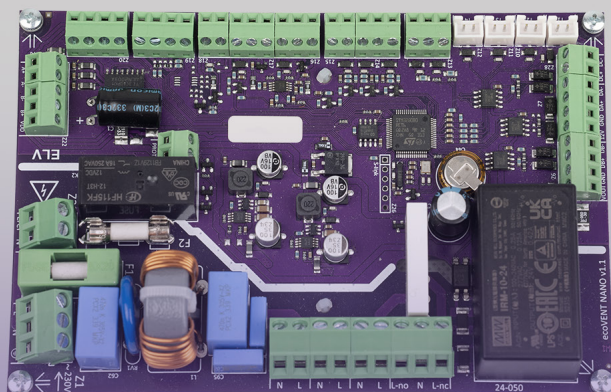




evoVENT NANO

controller for air handling
units and recuperation

The evoVENT NANO controller is designed for built-in installation. It allows to control small, medium and large ventilation units.

Built-in support for a stepper motor and cooperation with sensors (humidity, temperature, air quality) allows to design the most cost-effective solution.

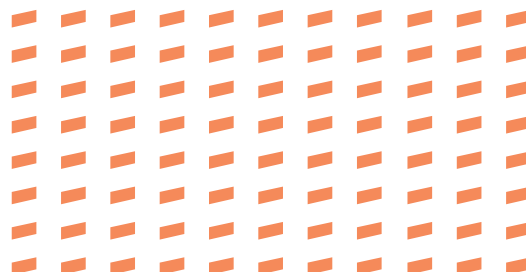
Why you should choose evoVENT NANO controller?

- reduce the cost of your recuperator
- activate zone control, save energy by enjoying fresh air according to real demand
- enable installers to easily connect devices with the evoNEXT Installation Assistant and the evoNEXT app
- connect recuperation and heat pump in a single system via evoNET Cloud

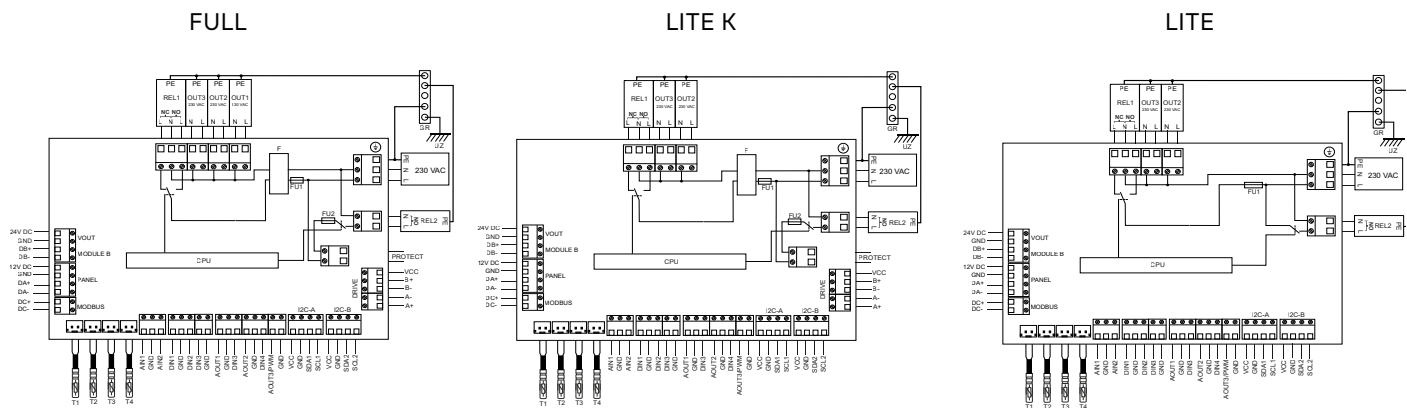
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edition
1.2, 4.09.2026



electrical scheme



The controller allows any configuration of the outputs depending on the needs of the ventilation system. Possible configuration of the FULL version is described below.

voltage outputs

OUT1, OUT2, OUT3	voltage outputs 230 VAC to supply peripherals
VOUT	voltage 24VDC (FULL)/ 12VDC (LITE K / LITE) to supply module B or peripheries

relay outputs (potential)

REL1, REL2	bypass, rotary exchanger, heater, etc.
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sensor channels

I2C-A, I2C-B	(free configuration) humidity sensor/ CO2 /differential pressure sensor/ pressure sensors evoPRESS IN (SDP810)
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stepper motor

DRIVE	power and control of a unipolar stepper motor, e.g. of a mixing chamber damper
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analogue outputs (0...10 V/ PWM)

AO1, AO2, AO3 (0-10 V/PWM)	(free configuration) pre-heater, water secondary heater, electric secondary heater, chiller, cooler, bypass damper, rotary heat exchanger, mixing chamber actuator, supply and exhaust fans
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two-state inputs

DIN1, DIN2, DIN3	(free configuration) pre-heater thermostat, electric secondary heater thermostat, water secondary heater thermostat, unit signals (alarm/ defrost), cooler fault, control panel signal, fire alarm system (FAS) signal, filter pressure switch signals, fan operation confirmation signals, CO2 sensor signal, humidity sensor signal, Boost signal, remote shutdown signal
IND1, IND2	TACHO - monitoring of fan operation

contact inputs

PROTECT	heater thermal protection contact
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analogue inputs (0...10 V)

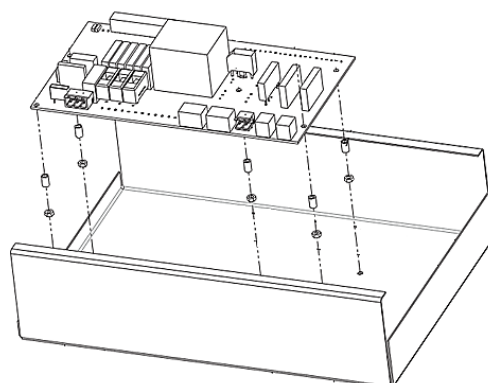
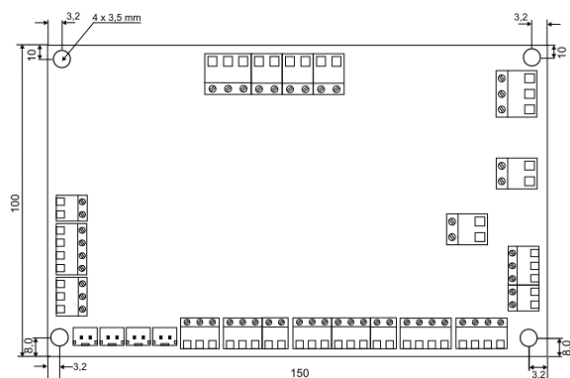
AI1, AI2	(free configuration) humidity sensor/ CO2 sensor/ VOC sensor (PM 2.5 or PM 10)
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resistance inputs (NTC 10K)

T1, T2, T3, T4	sensors required for correct operation of ventilation: supply, extract, exhaust and air intake (outdoor temperature sensor)
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sensors channels	control panel, module B, BMS
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assembly and installation



technical data

hardware execution	FULL	LITE K	LITE
power supply/ current drawn/ max. rated current	230 VAC, 50 Hz/ 40 mA/ 6 (6) A		
surge voltage	2500 V		
protection degree	IP 00, for incorporation into class I devices		
operating temperature	0...50 °C		
storage temperature	0...65 °C		
working conditions	5...85% RH (non-condensing), low-dust enclosed rooms		
software	PLUM software, class A		
communication	3 x communication port (RS485, modbus RTU protocol)		
outputs	2 x potential 230 V relay 3 x 230 V output for power supply periphery 1 x thermal heater protection 2 x analogue 0-10 V 1 x analogue PWM (or 0-10 V) 1 x 24 VDC output	2 x potential 230 V relay 2 x 230 V output for peripheral power supply 1 x heater thermal protection 2 x analogue 0-10 V 1 x analogue PWM (or 0-10 V) 1 x 12 VDC output	2 x potential 230 V relay 2 x 230 V output for power supply peripheries 2 x analogue 0-10 V 1 x analogue PWM (or 0-10 V) 1 x 12 VDC output
inputs	4 x resistive (CT14 NTC 10k) 2 x TACHO/ fan operation monitoring 3 x DIN binary inputs 2 x analogue 0-10 V 2 x I2C sensor		
extensions	1 x stepper motor support, unipolar 24 VDC / max 6 W 1 x interference filter F 1 x protection FU2: 20 A of the heater 1 x additional module B for the installer	1 x stepper motor support, unipolar 12 VDC/ max 6W 1 x interference filter F 1 x protection FU2: 20 A of the heater 1 x additional module B for the installer	1 x additional module B for the installer
screw terminals, angled	mains: conductor cross-section: 0.5..2.5 mm ² , tightening 0.4 Nm, insulation off 7..8 mm signal: conductor cross-section: 0.25...1.5 mm ² , tightening 0.2 Nm, insulation off 7 mm		
dimensions	150 x 100 mm, height 34 mm (including 9 mm spacers)		
installation method	to be built in		

sensors



SCO2 EX1

CO₂, relative humidity and
temperature sensor



evoPRESS EX1 - 01, EX1 - 02

differential pressure
sensor



SCO2 IN1

CO₂, relative humidity and
temperature sensor



evoPRESS IN

differential pressure
sensor



SRHT IN1

relative humidity and
temperature sensor

