

Electronic temperature controller for fans

The GTE fan speed controller automatically regulates the speed of single phase voltage controllable motors (230 VAC / 50–60 Hz) according to the measured temperature values. The maximum speed can be adjusted via an internal trimmer. The minimum speed and temperature setpoint can be adjusted via external potentiometers. There are two product versions: DM with Modbus RTU communication and DT with an integrated socket and a PT500 probe. The fan speed will increase as the measured temperature exceeds the setpoint temperature.

Key features

- PT500 temperature probe input (pre-wired for the DT version and separately available for the DM version)
- Potentiometer for temperature setpoint range: 5–35 °C or 15–35 °C, depending on the product version
- Potentiometer for minimum speed setting
- Internal trimmer for maximum speed setting
- Adjustable hysteresis and proportional range
- Enclosure: RABS V0, grey (RAL7035)
- Modbus RTU communication (only in -DM version)
- Schuko socket for motor connection (only in -DT version)
- Euro plug for power supply (only in -DT version)
- Pre-wired temperature sensor and supply cable (only in -DT version)

Area of use

- Greenhouses and temperature controlled ventilation systems
- For indoor use only

Technical specifications

Supply voltage	230 VAC ±10 % / 50–60 Hz	
Output load, I _{max}	6 A	
V _{min} adjustable via potentiometer	80–160 VAC	
V _{max} adjustable via internal trimmer	170–230 VAC	
Potentiometer temperature setpoint	GTE21-60-DM	Temperature range: 5–35 °C
	GTE21-60-DT	Temperature range: 5–35 °C
Protection standard	GTE-1-60-DM	Temperature range: 15–35 °C
	GTE-1-60-DT	Temperature range: 15–35 °C
Protection class	IP54	
Ambient conditions	Operating temperature	0–40 °C
	Relative humidity	< 95 % (non-condensing)

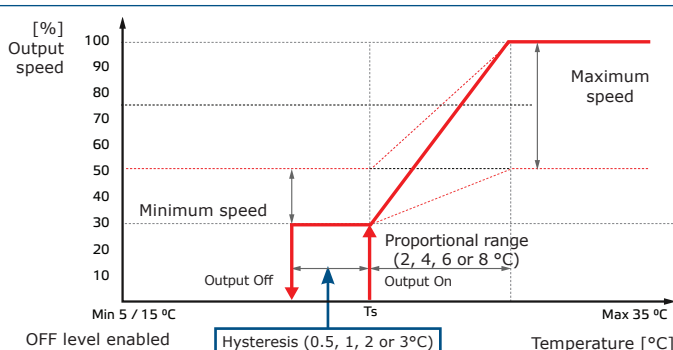
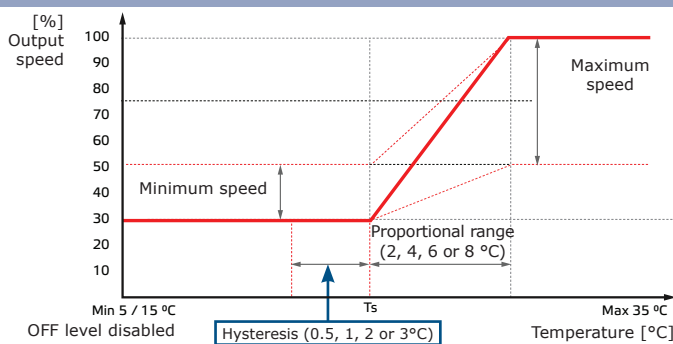


Article codes

Article code	Temperature range	PT500 included	Schuko socket	Supply cable	Modbus RTU
GTE21-60-DM	5–35 °C	no	no	no	yes
GTE21-60-DT	5–35 °C	yes	yes	yes	no
GTE-1-60-DM	15–35 °C	no	no	no	yes
GTE-1-60-DT	15–35 °C	yes	yes	yes	no

Operational diagrams

GTEX1-60-DT and GTEX1-60-DM



Wiring and connections

GTEX1-60-DM	
L	Supply voltage 230 VAC / 50–60 Hz – mono phase ±10%
N	Neutral
L1	230 VAC not regulated output (max. 2 A)
GND, T (TEMP.)	PT500 temperature sensor
A	RS485 signal A
/B	RS485 signal /B
P5	Motor connection
GTEX1-60-DT	
L	Supply voltage 230 VAC / 50–60 Hz – mono phase ±10%
N	Neutral
PE	Ground
L1	230 VAC not regulated output (max. 2 A)
GND, T (TEMP.)	PT500 temperature sensor
Schuko socket	Motor connection



Settings

1 - Proportional range jumpers JP 1 & JP 2	J1 <input checked="" type="checkbox"/> J2 <input checked="" type="checkbox"/>	Proportional range setting: 2 °C
	J1 <input type="checkbox"/> J2 <input checked="" type="checkbox"/>	Proportional range setting: 4 °C (factory pre-set)
	J1 <input checked="" type="checkbox"/> J2 <input type="checkbox"/>	Proportional range setting: 6 °C
	J1 <input type="checkbox"/> J2 <input type="checkbox"/>	Proportional range setting: 8 °C
2 - Hysteresis jumpers JP 3 & JP 4	J3 <input checked="" type="checkbox"/> J4 <input checked="" type="checkbox"/>	Hysteresis: 0,5 °C
	J3 <input type="checkbox"/> J4 <input checked="" type="checkbox"/>	Hysteresis: 1 °C
	J3 <input checked="" type="checkbox"/> J4 <input type="checkbox"/>	Hysteresis: 2 °C (factory pre-set)
	J3 <input type="checkbox"/> J4 <input type="checkbox"/>	Hysteresis: 3 °C
3 - OFF level jumper JP 5	J5 <input checked="" type="checkbox"/>	OFF level is ON
	J5 <input type="checkbox"/>	OFF level is OFF (factory pre-set)
4 - Max. speed trimmer		Vmax set from 170 VAC (left) to 230 VAC (right) (factory pre-set to max.)
5 - Network Bus Termination Resistor (NBT)*	<input checked="" type="checkbox"/>	NBT is connected
	<input type="checkbox"/>	NBT is disconnected (factory pre-set)

How to configure



Via a Sentera Internet Gateway you can connect your installation to the SenteraWeb HVAC cloud and:

- Easily change the parameter settings of the connected devices remotely
- Define users and give them access to monitor the installation via a standard web browser
- Log data - create diagrams and export logged data
- Receive alerts or warnings when measured values exceed alert ranges or when errors occur
- Create different regimes for your ventilation system - e.g. day-night regime

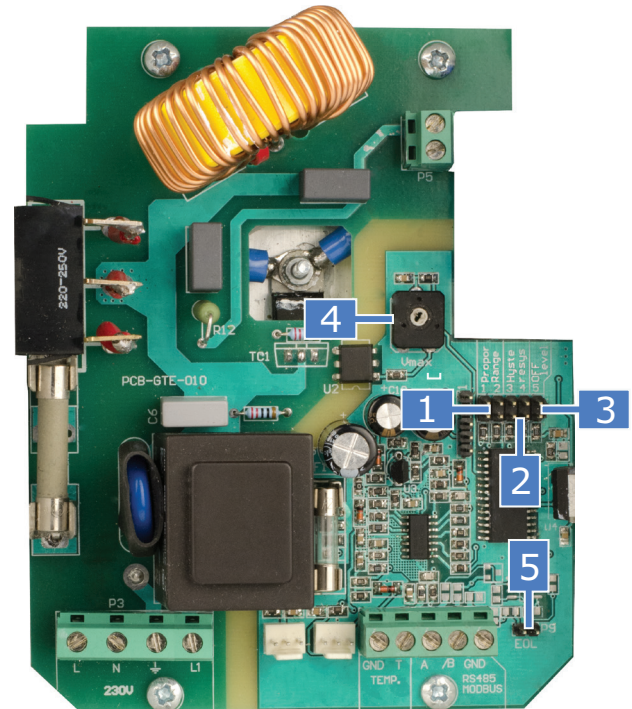
Please refer to the Modbus Register Map of the product for more details regarding the Modbus registers.

Standards



- Low Voltage Directive 2014/35/EC
- EMC Directive 2014/30/EC: EN 61000-3-2:2014, EN 61000-6-2:2005/AC:2005 and EN 61000-6-3:2007/A1:2011/AC:2012
- RoHS Directive 2011/65/EU

GTEX1-60-DM



GTEX1-60-DT



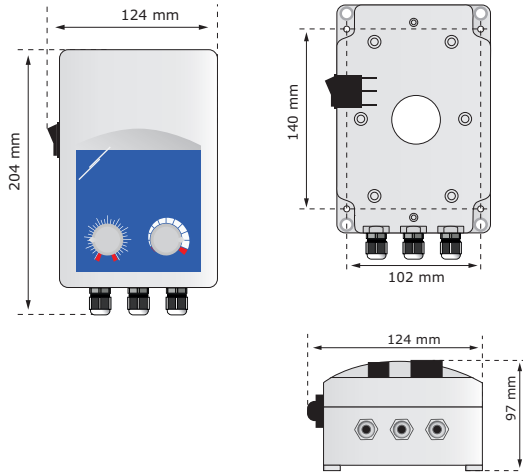
GTE

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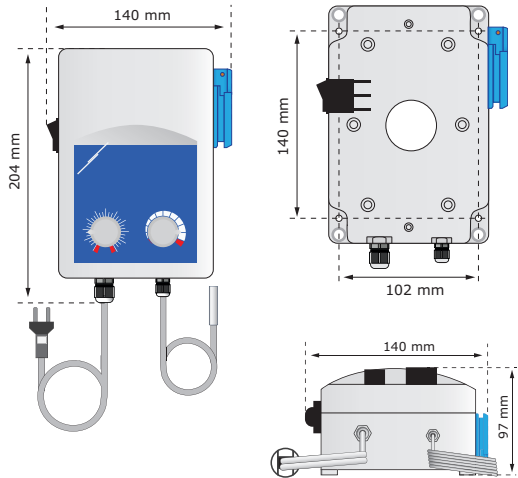


Fixing and dimensions

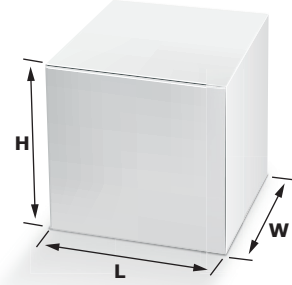
GTEX1-60-DM



GTEX1-60-DT



Packaging



Article	Packaging	Length [mm]	Width [mm]	Height [mm]	Net weight	Gross weight
GTEX1-60-DM	Unit (1 pc.)	220	128	108	0,835 kg	0,927 kg
	Box (60 pcs.)	590	380	280	12,525 kg	14,757 kg
GTEX1-60-DT	Unit (1 pc.)	245	155	115	1,094 kg	1,236 kg
	Box (60 pcs.)	590	380	280	12,036 kg	14,236 kg

Global trade item numbers (GTIN)

Packaging	Unit	Box
GTE-1-60-DM	05401003007297	05401003501375
GTE-1-60-DT	05401003007303	05401003501382
GTE21-60-DM	05401003007310	05401003501399
GTE21-60-DT	05401003007327	05401003501405