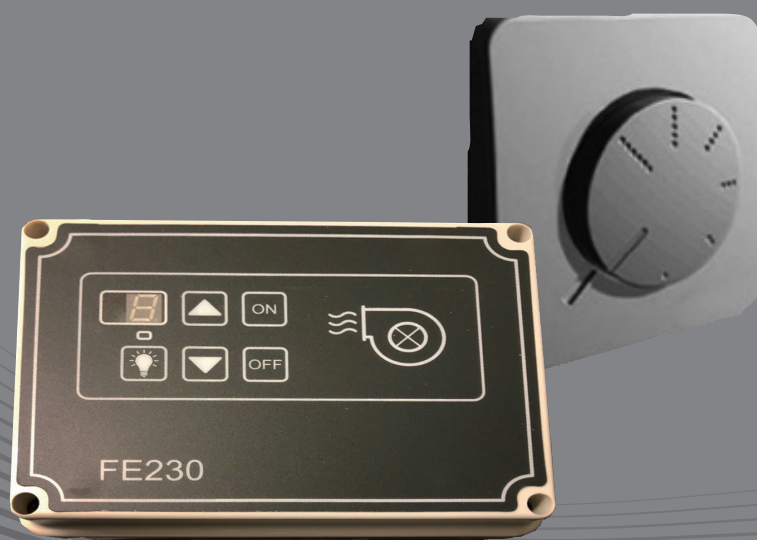


WALPOL

Assembly and operating instructions
Electronic speed control units



Version 5.1
B21

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1. General information

1.1. Note symbols



Danger

Immediate hazard

Failure to observe the warning will result in immediate death or serious injury.



Caution

Low-risk hazard

Failure to observe the warning may result in moderate injury.



Warning

Potential hazard

Failure to observe the warning may result in death or serious injury.

Important

Danger with risk of property damage

Failure to observe the warning may result in property damage.



Note

Useful information and instructions

2. Important safety instructions

Planners, system builders and operators are responsible for proper installation and operation in accordance with the intended use.

- Read the operating instructions completely and carefully.
- Operating instructions and applicable documents, such as electrical connection diagrams or operating instructions for the motor, must be kept with the speed controller. They must always be available at the place of use.
- Local and national laws and regulations must be observed and complied with.
- Take into account the system-relevant conditions and requirements of the system manufacturer or system builder.
- Safety devices must not be dismantled, bypassed or rendered inoperative.
- The speed controller may only be used if it is in perfect condition.
- The generally prescribed electrical and mechanical protective devices must be provided.
- Secure the installation site and the premises against access by unauthorised persons during installation, electrical connection, commissioning, troubleshooting and maintenance.
- Safety devices must not be dismantled, bypassed or rendered inoperative.
- Ensure that all warning labels on the speed governor are complete and legible.
- This device is not intended for use by persons (including children) with reduced physical or mental capabilities, or lack of experience and prior knowledge, unless such persons have been instructed in the use of the device by a person responsible for their safety.

2.1. Personnel

The speed governor may only be operated by qualified, instructed and trained personnel. These persons must know the relevant safety regulations in order to recognise and avoid possible dangers. The individual actions and qualifications can be found in Table 1 Qualification.

Table 1 Qualification

Actions	Qualification	
Storage, operation, transport, cleaning, disposal	Trained personnel (s. following instructions)	
Electrical connection, commissioning, electrical disconnection, installation, Dismantling	Qualified electricians or persons with appropriate qualifications	
Maintenance	Qualified electricians or persons with appropriate qualifications	Qualified fitters or persons with appropriate qualifications
Repairs	Qualified electricians or persons with appropriate qualifications Qualified fitters or persons with appropriate qualifications	Assembly specialist or persons with appropriate qualifications



Note

The operator must ensure that the personnel have been instructed in the operation and have understood the operating instructions. If anything is unclear, please contact Walpol or our representatives.

2.2. Safety rules for working in and on electrical systems

- | | | |
|---|--|---|
| 1. Disconnect (disconnect all poles of an electrical system from live parts | 2. Secure against being switched on again
3. Check that no voltage is present | 4. Earth and short-circuit
5. Cover or isolate adjacent live parts |
|---|--|---|

- Disconnect the device from the power supply and secure it against being switched on again.
- Check that there is no voltage using a two-pole voltage tester.
- It is strictly forbidden to carry out work on parts that are live.
- Electrical connection only in accordance with the enclosed wiring diagrams
- Connect the unit only to a suitable base and only to firmly laid cables.
- The unit must be closed during operation.

3. Warranty

For warranty claims to be valid, the products must be properly connected and operated and used in accordance with the data sheets.

4. Delivery, transport, storage

Safety instructions

Delivery

Each speed controller leaves our factory in perfect electrical and mechanical condition. It is recommended that the speed controller be transported to the installation site in its original packaging.

Check delivery

- Check the packaging for transport damage. Any damage must be noted in the cargo manifest.
- Check that the delivery is complete.

Unpacking



Warning

Remove the transport packaging

- Unpack the speed controller carefully.
- Check the speed controller for obvious transport damage.
- Do not remove the packaging until just before installation.

Transport

Safety instructions

Warning: Electrical or mechanical hazard due to fire, moisture, short circuit or malfunction.

- In the case of open transport, ensure that no water can penetrate the speed controller.
- It is recommended that the speed controller be transported to the installation site in its original packaging.

Storage

- Store the speed controller in its original packaging in a dry, dust-free place protected from the weather.
- Avoid exposure to extreme heat or cold.
- Store in the temperature range -5°C to +50°C

5. Description

5.1. Speed controller type DSE

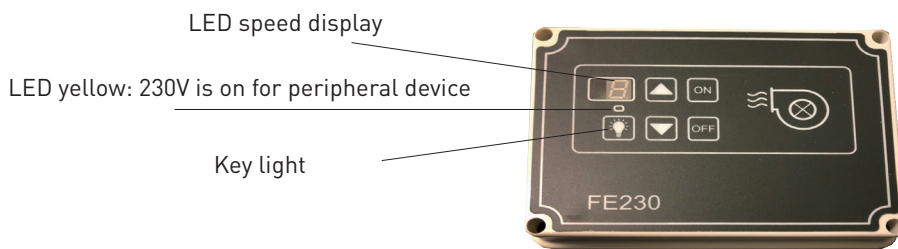
- The controller provides manual control of the speed of controllable voltage (230 VAC, 50 Hz) motors by varying the supply voltage through phase angle control.
- Multiple fans can be connected as long as the current limit is not exceeded.



Type	Voltage	Current	Dimensions (height x width x depth)	Weight kg
DSE-1	230 V	1.0 A	82 x 82 x 65 mm	0,26
DSE-2	230 V	2.0 A	82 x 82 x 65 mm	0.26

- Power supply: 230 VAC ± 10 % / 50 Hz.
- Unregulated input / output: 230 VAC / max. 2 A
- Minimum speed adjustment of trim potentiometer: 80-180 VAC
- Speed control
 - MTX - from maximum to minimum
 - MTY - from minimum to minimum
- Enclosure:
 - external: ASA, white ivory (RAL9010), IP54 (according to EN 60529)
 - internal: polyamide, white ivory (RAL9010), IP44 (according to EN 60529)
- Operating Permissible Ambient Conditions:
 - Temperature: 0-35 °C
 - Relative humidity: < 100 % rH (non-condensing)
 - Storage temperature: -10-40 °C

5.2. Speed controller type FE



Type	Voltage	Current Fan	Current Light	Dimensions (height x width x depth)	Weight kg
Digital	230 V	4.5 A max	2 A max	158 x 117 x 77 mm	0.37

6. Installation



Note

This is not a ready-to-plug-in unit.

After installation as intended, this is a component in a system. The system as a whole must be installed in accordance with the relevant regulations. The VDE and EVU regulations must be observed. If necessary, the installer must coordinate the effect of this unit on the function of a ventilation and heating system with the system designer and the system operator.

- **The manufacturer reserves the right to make changes to the unit or documentation without prior notice, e.g. to improve performance.**
- **The manufacturer is not liable for damage caused by misuse, improper use, incorrect use or as a result of unauthorised repairs/modifications.**
- Before installation, check the surface for load-bearing capacity.
- Connect the unit only to permanently laid cables.
- Electrical connection only in accordance with the currently valid VDE and EN guidelines as well as TAB's (Technical Connection Conditions) of the regional power supply companies
- The controller is to be fastened to a flat surface (wall etc.) by means of threaded screws.
- Open the controller housing by loosening the screws of the cover incl. grommets.
- Pull the cables through the grommets.
- The connection must be carried out according to the wiring diagram.
- Before closing the cover, position the internal cables correctly.
- Installation fuses must be installed in the external mains supply circuit.

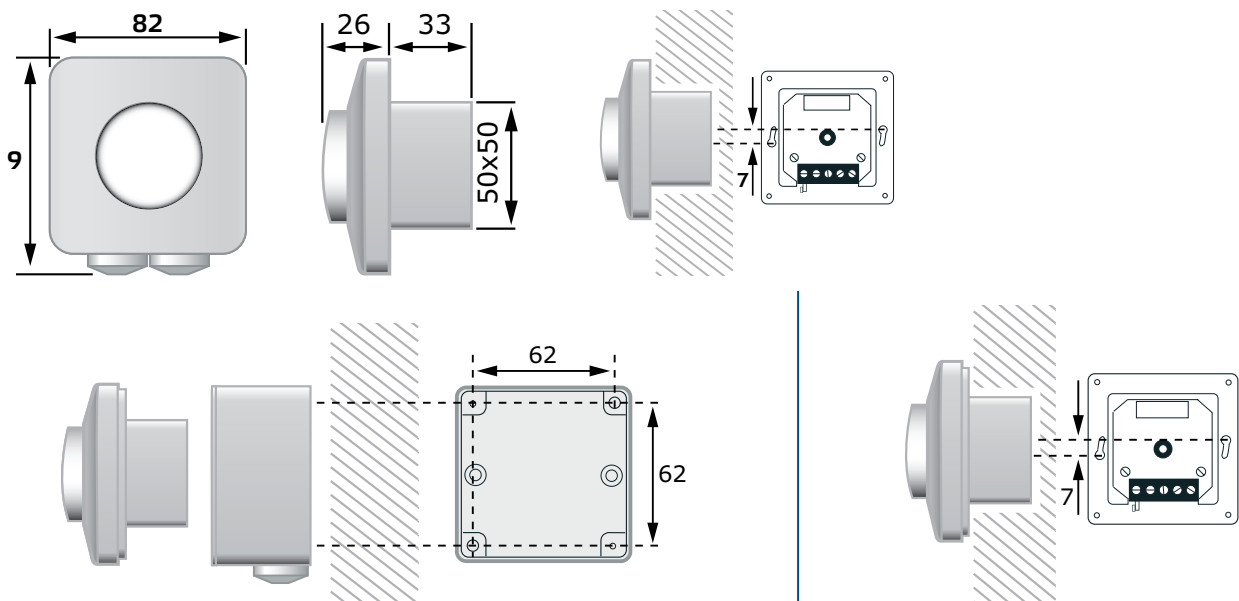
General safety instructions

- The installation may only be carried out by appropriately qualified persons, for details, see. Table 1 Qualification.
- Observe the system-relevant conditions and requirements of the system manufacturer or system builder.
- Safety devices must not be dismantled, bypassed or rendered inoperative.
- There is a risk of electric shock when installing a live controller.

Requirements

- Make sure that the speed controller and all its components are undamaged.
- Make sure that there is sufficient space for mounting the speed controller.
- When mounting, protect the unit from dust and moisture.
- Make sure that the information on the type plate (speed controller and motor) corresponds to the operating conditions.
- Mount the speed controller so that there is sufficient access for troubleshooting, maintenance and repair work.

6.1. Mounting DSE



6.2. Mounting FE (surface mounting)

Surface mounting by means of 4 screws on wall

7. Electrical connection

Warnings:

- Before installing and plugging the controller into the mains, check that the technical characteristics explained in these instructions also correspond to those of the electrical mains and voltage.
- Always use good quality and appropriate electrical cables to connect the controller to the mains and voltage.
- The electrical equipment must be checked regularly: Damaged wires and cables must be replaced immediately.
- Install the controller in ventilated places and away from heat sources, especially if the current load is near the maximum power.
- After removing the cover to attach it to the bracket, connect the cables to the terminal strip on the board according to the connection diagram.
- Then carefully close the cover again.



Warning

Danger from electrical voltage!

- The safety rules must be observed, see Safety rules for working in and on electrical installations
- Prevent water from entering the terminal box.
- The electrical connection may only be carried out by suitably qualified persons, for details see. Table Qualification

Regulations:

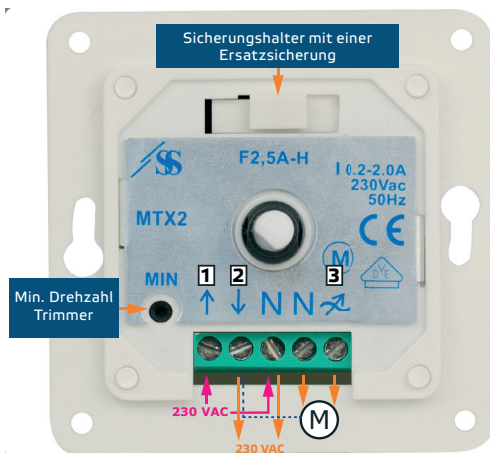
- Accident prevention regulations VGB, BGV A3, TRBS
- DIN VDE 0100, DIN VDE 0105
- EN 60730 (Part 1)
- Regulations (TAB's) of the local VNB
- As well as generally recognised rules of technology.
- Assembly, electrical connection and commissioning may only be carried out by a qualified electrician, in accordance with the electrotechnical regulations (e.g. DIN EN 50110 or DIN EN 60204) !
- Connection diagram only for Walpol products if other controllers/fans from other companies are used, the connection may vary!
-



Note

If connection of a gas solenoid valve is required, we recommend installation in accordance with DVGW G

7.1. Connection diagram and function of speed controller type DSE



↑	Stromversorgung (230 VAC ± 10 % / 50 Hz)
↓	Ungeregelten Ausgang (230 VAC / max. 2 A) Für den Anschluss einer Lampe, Ventil ... oder Dreileiter-Motoranschluss; nach dem Schalter / Eingang an Bypass-Schalter verzweigt.
N	Neutral
~	Geregelten Ausgangs zum Motor
Anschlüsse	Kabelquerschnitt: max. 2,5 mm ²

11. EU Declaration of Conformity



EU KONFORMITÄTSERKLÄRUNG

Der Hersteller: Sentera Europa NV
Duitslandstraat 9
BE-9140 Temse

Tel. +32 3 771 36 51
info@sentera.eu

Erklärt unter alleinigen Verantwortung dass:

MTX-series Elektronische Drehzahlregler

Falls installiert, gepflegt und verwendet in Anwendungen für denen sie entworfen werden, und in Übereinstimmung mit den relevanten Installationsstandards und Anweisungen des Herstellers, die Vorschriften vom folgenden relevanten Harmonisierungsrechtsvorschriften des Europäischen Union entsprechen, soweit zutreffend:

Niederspannungsrichtlinie 2014/35/EU

EN 60335-1:2012 Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke – Teil 1: Allgemeine Anforderungen Änderung A11:2014 und AC: 2014 zu EN 603351:2012

EN 61558-1:2005 Sicherheit von Transformatoren, Netzgeräten, Drosseln und dergleichen- Teil 1: Allgemeine Anforderungen und Prüfungen: Änderung AC: 2006 und A1:2009 zu EN 61558-1:2005

Richtlinie über elektromagnetische Verträglichkeit 2014/30/EU

EN 61000-6-2:2005 Elektromagnetische Verträglichkeit (EMC) - Teil 6-2: Fachgrundnormen - Störfestigkeit für Industriebereiche Änderung AC: 2005 zu EN 61000-6-2:2005

EN 61000-6-3:2007 Elektromagnetische Verträglichkeit (EMC) – Teil 6-3: Fachgrundnormen – Abgasnorm für den Wohnbereich , Geschäfts-und Gewerbebereiche sowie Kleinbetriebe. Änderung A1:2011 und AC: 2012 zu EN 61000-6-3:2007

WEEE directive 2012/19/EU – Elektro –und Elektronikgeräte Abfall

RoHS Directive 2011/65/EU – Beschränkung der Verwendung bestimmter gefährlicher Stoffe in Elektro- und Elektronikgeräten

Die Produkte sollten nur von Fachpersonal installiert und gepflegt werden, gemäss den lokalen Vorschriften. Diese Erklärung ist nur gültig falls die Geräte bedient und installiert werden gemäss der Montaganleitung des Produktes. Die Produkte, Montage oder Teilmontage gedeckt von diesen Konformitätserklärung. dürfen nicht in Betrieb genommen werden bis die Anlage in denen es eingebaut wird in Konformität erklärt wird mit den Vorschriften von den anwendbaren Richtlinie(n). Diese Erklärung ist nur notwendig falls das Produkt in einem System oder Anlage eingebaut wird. (z.B. Sicherheitselement).

Die CE Marke ist angebracht.

Ausstellungsdatum: den 14. November 2016

Ausstellungsort: Temse, Belgien

Jos Raskin
Chief Executive Officer

www.WALPOL.eu