VARGA SYSTEM

Assembly Instructions
Speed Controller for VARGA Circular Saws

Suitable for models

VA 11

VA 21-15

VA 31-15

Current version	2.1
Date	14.01.2026
Scope	24 pages

IMPORTANT:

READ CAREFULLY BEFORE USE

KEEP FOR FUTURE REFERENCE

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1 Introduction

1.1 Identification

Product name	Speed Controller for VARGA Circular Saws
Product type	Speed controller
Only usable with the models	VARGA Circular Saws VA-11, VA 21-15, VA 31-15
Year of manufacture	2026

1.2 Manufacturer

Manufacturer's name	VARGA SYSTEM GmbH
Street	Hainkämpe 5
ZIP code, city	28832 Achim
Country	Deutschland
Telephone	+49 4232 945870
Email	info@varga-system.com
Web	www.varga-system.com

1.3 Information about the assembly instructions

Current version	2.1
Date	18.07.2025

1.4 Change history

Date	Version	Sections affected	Reason for change
08.05.2025	1.0	All	Final version of the document created
18.07.2025	2.0	All	General adjustments
14.01.2026	2.1	7	After finishing work, disconnect the speed controller's power plug from the power supply.

1.5 Other applicable documents

In addition to these installation instructions, the following documents must also be observed:

- Translation of original operating instructions *VARGA precision circular table saw*
- Technical information *Cutting speed range of carbide precision circular saw blades*

1.6 Type plate

1.6.1 Variant 230 V~ mains voltage

Figure 1 Speed controller type plate 230 V~ mains voltage

The type plate shown above is attached to the speed controller.

1.6.2 Variant 100-120 V~ mains voltage

Figure 2 Speed controller type plate 100-120 V~ mains voltage

The type plate shown above is attached to the speed controller.

2 About these assembly instructions

These assembly instructions describe the *speed controller for the VARGA precision circular table saws (VA-11, VA 21-15, VA 31-15)* and supplement the document *Translation of original operating instructions for VARGA precision circular table saw*. Always consult both documents when using or handling the speed controller.

2.1 Presentation of information

Safety instructions are presented in the instructions by a pictogram and a keyword.

The content of the information is structured as follows:

Type/source of danger!

Possible consequences!

➢ Measures for prevention

⚠ DANGER!

“DANGER” is used when death or serious damage to health **will** occur if the warning is not observed.

⚠ WARNING!

“WARNING” is used when death or serious damage to health **may** occur if the warning is not observed.

⚠ CAUTION!

“CAUTION” is used when moderate or slight damage to health may occur if the warning is not observed.

ATTENTION

“ATTENTION” is used when damage to the machine or surroundings may occur if the warning is not observed.

NOTE
Helpful application tips and information for using the machine.

	Cross-reference to a specific document.

2.2 Presentation of lists

Lists are presented with bullet points. Example:

- Point 1
- Point 2

2.3 Presentation of actions required

2.3.1 Actions with a sequence to be followed

Actions to be carried out in a defined sequence are numbered and displayed in a list. The system reaction of the machine to the respective action is shown in italics and has a check mark before it. Example:

Action required

1. Activity, e.g. press the “Horn on” button.

☑ *Reaction 1, e.g. “The signal tone sounds".*

2. Activity, e.g. press the “Horn off” button.

☑ *Reaction 1, e.g. “The signal tone stops".*

2.3.2 Actions without a sequence to be followed

Actions to be carried out without a fixed sequence are shown with an arrow. The system reaction of the machine to the respective action is shown in italics and has a check mark before it. Example:

Action required

➢ Activity, e.g. press the “Horn off” button.

☑ *Reaction 1, e.g. “The signal tone stops".*

3 Safety

3.1 General safety instructions

- Damage due to incorrect handling of the machine. The machine is manufactured according to the current state of the art and in compliance with the relevant legal regulations. Nevertheless, dangers to persons and/or the environment may occur. Deploy trained personnel only.
- Always refer to the original VARGA precision circular table saws operating instructions when using the speed controller.
- Failure to observe these operating instructions can have serious consequences for persons or the environment. Always observe the operating instructions.
- Improper use of the machine may result in serious personal injury and damage to the machine. Only use the machine as intended.

3.2 Intended use

- The speed controller may only be used in combination with the VA 11, VA 21-15 and VA 31-15 models. Separate or independent operation is not permitted.
- The speed controller enables infinitely variable speed control between 13000 rpm and 15000 rpm and must be used to operate the machine.

3.3 Reasonably foreseeable misuse

- Connection to circular saws other than the specified VARGA precision circular table saws is prohibited.
- Use of the speed controller without having read the original VARGA precision circular table saws operating instructions in addition to these assembly instructions is prohibited.

3.4 Residual risks

Danger of electric shock

Contact between the saw blade and the live cable will result in an electric shock. This will cause serious injury or death.

➢ Use the cable retaining spring for the power cable.

➢ Work with care.

Danger due to electrical voltage

Working with live components may result in direct contact with them. This will cause burns, serious injury, or death.

- Work on electrical equipment may only be carried out by qualified electricians of the manufacturer or specially authorized and trained electricians.
- Carry out work in compliance with the safety regulations.
- Switch off all machines before starting work and disconnect them from the power supply.
- Do not open the speed controller housing.
- Return defective speed controllers to the manufacturer.

Danger due to improperly laid cables

Improperly laid cables can cause dangers such as tripping or falling. This can result in bruises, sprains, or fractures.

- Lay and cover cables safely.
- Work with care.

3.5 Safety markings on the machine

There are safety markings on the machine that indicate residual risks that cannot be avoided by design.

	**Meaning:** Warning of a danger point. **Position:** On the top of the speed controller.
	**Meaning:** Warning of electrical voltage. **Position:** On the housing of the speed controller

4 Technical data

4.1 Technical data Variants

4.1.1 Variant 230 V~ mains voltage

Speed controller (length x width x height)	194 x 94 x 71 mm
Adjustment range	13000 – 15000 rpm
Supply voltage	230 V~ 50 Hz
Maximum output power: P	800 W
Fuse	Diameter 5 x 20 mm T 4 A 250 V

4.1.2 Variant 100-120 V~ mains voltage

Speed controller (length x width x height)	194 x 94 x 71 mm
Adjustment range	13000 – 15000 rpm
Supply voltage	100-120 V~ 50/60 Hz
Maximum output power: P	800 W
Fuse	Diameter 5 x 20 mm T 6.3 A 250 V

NOTE

The voltage rating of 250 V indicated on the fuse represents the maximum operating voltage at which the fuse can safely and reliably interrupt the circuit in compliance with applicable standards. It is therefore fully suitable for use at lower voltages, such as 120 V~.

4.2 Ambient conditions

4.2.1 Operating conditions

Area	Indoors
Air temperature	+5°C to +40°C *(short-term +70°C for a maximum of 24 hours)*
Humidity	max. 50% at +40°C *(higher relative humidities are permissible at lower temperatures (e.g. 90% at 20°C))*

4.2.2 Storage conditions

Area	Indoors
Air temperature	-24°C to +55°C *(short-term +70°C for a maximum of 24 hours)*
Humidity	max. 50% at +40°C *(higher relative humidities are permissible at lower temperatures (e.g. 90% at 20°C))*

4.2.3 Time limits

The service life depends on use and the maintenance intervals observed by specialist personnel. Preventive maintenance has a particular impact on service life; this includes timely replacement of wear parts. Elements of functional safety chains, regardless of the standard(s) applied, must be replaced in good time before the calculated or specified service life is reached, in accordance with their switching frequency or operating time.

4.2.4 Spatial limits

The machine must be set up in such a way that there is sufficient space between the machine and other features (walls, other machine, etc.) to allow handling of larger workpieces and/or completion of maintenance and repair work.

5 Structure and function

5.1 Product overview

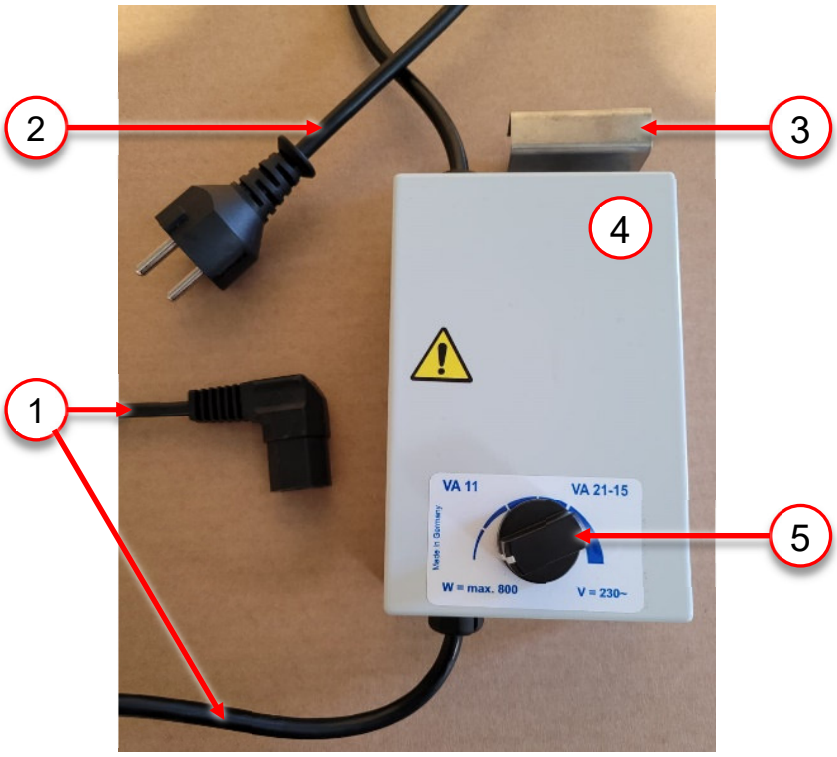

Figure 3 Product overview

Item	Designation
1	Connection plug with cable
2	Mains plug with cable
3	Bracket
4	Housing
5	Rotary knob

5.2 Functional description

The speed controller is part of the scope of delivery of the VARGA VA-11, VA-21-15 and VA-31-15 precision table saws. It allows the motor speed to be controlled in the range of 13000 rpm to 15000 rpm and must be used to operate the machine.

The speed controller is connected to the motor housing of the precision circular table saw using the connection cable (1, Figure 3) and to a power socket using the mains cable (2, Figure 3). A bracket (3, Figure 3) is attached, which is hooked onto the base of the precision circular table saw. The speed is set using the rotary knob (5, Figure 3).

6 Transport and installation

Target group: Maintenance personnel

6.1 Transport packaging

ATTENTION

Falling components

Improper transport can lead to material damage.

- When selecting the means of transport, observe the technical data of the machine and its individual components.

The speed controller is delivered in a cardboard box. Its light weight means that it can be carried without additional equipment.

6.2 Installation

⚠ DANGER!

Danger of electric shock

Contact between the saw blade and the live cable will result in an electric shock. This will cause serious injury or death.

- Use the cable retaining spring for the power cable.
- Work with care.

⚠ CAUTION!

Danger due to improperly laid cables

Improperly laid cables can cause dangers such as tripping or falling. This can result in bruises, sprains, or fractures.

- Lay and cover cables safely.
- Work with care.

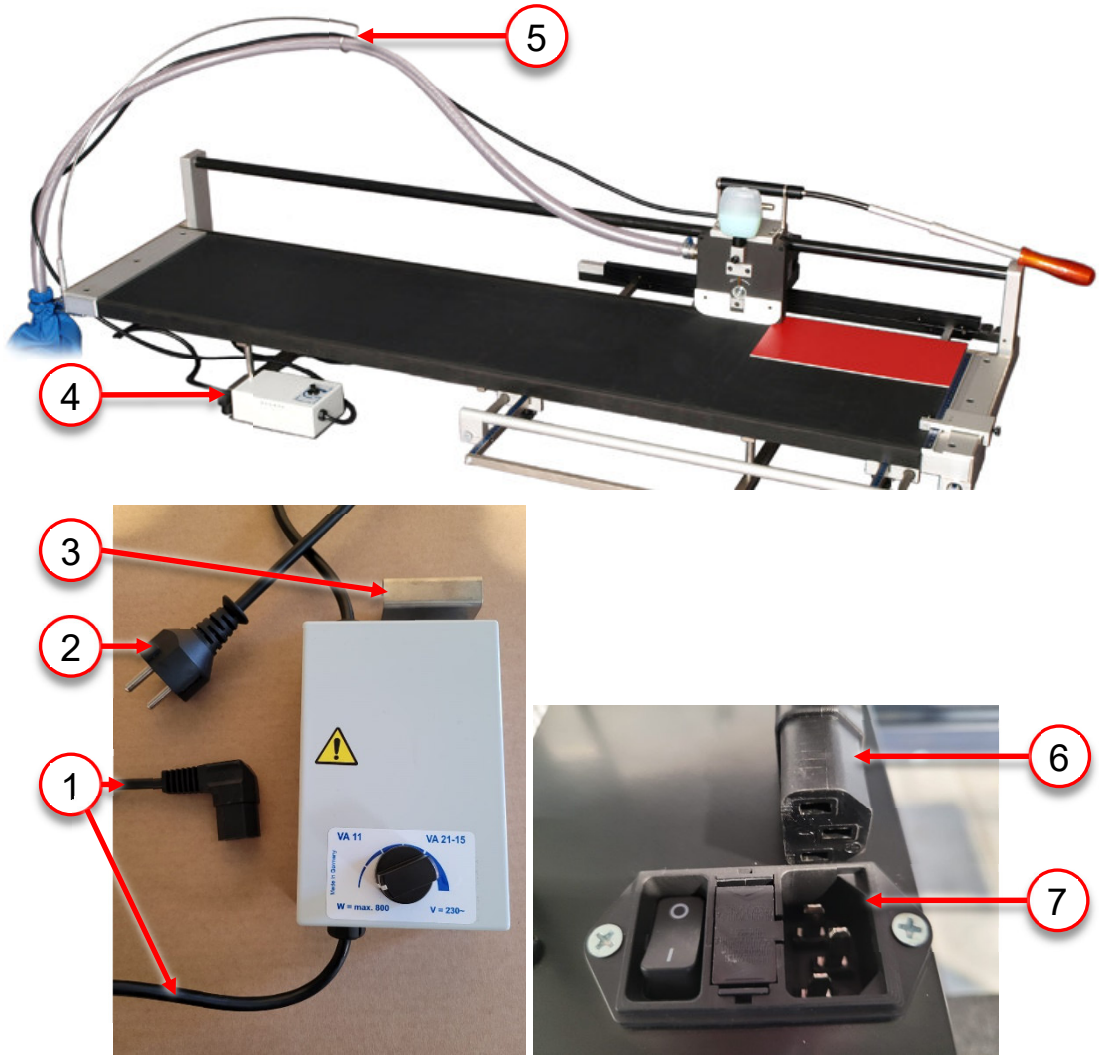

Figure 4 Installation

Item	Designation
1	Connection plug with cable (speed controller)
2	Mains plug with cable (speed controller)
3	Bracket
4	Precision circular table saw base
5	Cable retaining spring
6	Connection plug (speed controller)
7	Connection socket (precision circular table saw)

Action required

1. Ensure that the precision circular table saw is switched off.
2. Hook the speed controller onto the base of the precision circular table saw (4, Figure 4) using the bracket (3, Figure 4).
3. Lay the connection cable of the speed controller (1, Figure 4) around the precision circular table saw and hook it into the cable retaining spring (5, Figure 4).
4. Insert the connection plug of the speed controller (6, Figure 4) into the connection socket (7, Figure 4) on the motor housing of the precision circular table saw.

☑ *Speed controller is installed.*

5. Plug the mains plug of the speed controller (2, Figure 4) into a power socket.

☑ *Power supply is established.*

⚠ WARNING!

After finishing work, disconnect the speed controller's mains plug from the power supply.

7 Normal operation

Target group: Operating personnel, maintenance personnel

7.1 Special safety instructions

DANGER!

Danger due to electrical voltage

Working with live components may result in direct contact with them. This will cause serious injury or death.

- Work on electrical equipment may only be carried out by qualified electricians of the manufacturer or specially authorized and trained electricians.
- Carry out work in compliance with the safety regulations.

7.2 Selecting and setting the speed

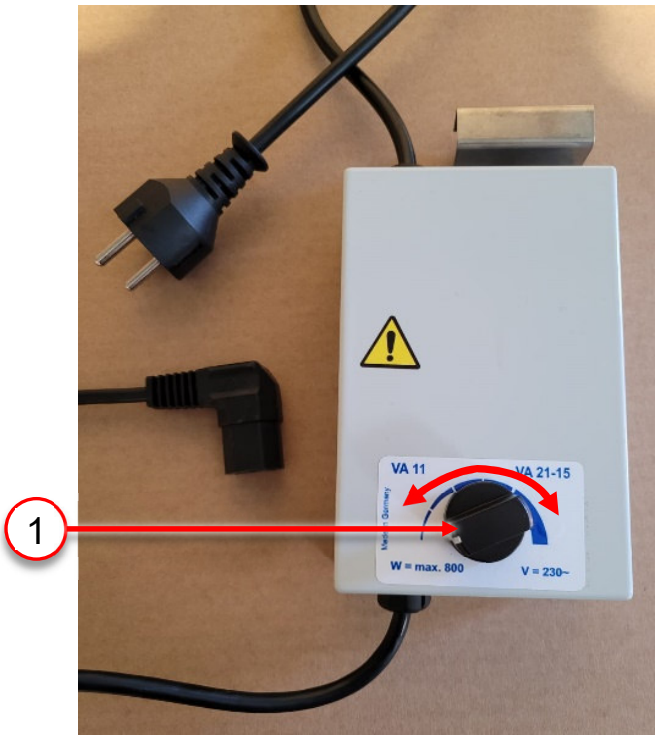

Figure 5 Selecting and setting the speed

Action required

⚠ CAUTION!

The speed may only be set when the precision circular table saw is switched off!

1. Ensure that the precision circular table saw is switched off.
2. Select the speed using technical information *Cutting speed range of carbide precision circular saw blades*.
3. Set the required speed by adjusting the rotary knob (1, Figure 5).

☑ *The speed is set.*

☑ *The sawing process can be carried out.*

⚠ WARNING!

After finishing work, disconnect the speed controller's mains plug from the power supply.

4. Disconnect the mains cable of the speed controller.

☑ *Power supply to the speed controller is disconnected.*

The technical information *Cutting speed range of carbide precision circular saw blades* can be found in the appendix to this document.

8 Maintenance

Target group: Specialist personnel

8.1 Special safety instructions

⚠ DANGER!

Danger due to electrical voltage

Working with live components may result in direct contact with them. This will cause burns, serious injury, or death.

- Work on electrical equipment may only be carried out by qualified electricians of the manufacturer or specially authorized and trained electricians.
- Carry out work in compliance with the safety regulations.
- Switch off all machines before starting work and disconnect them from the power supply.
- Do not open the speed controller housing.
- Return defective speed controllers to the manufacturer.

⚠ WARNING!

Danger due to unauthorized or improper maintenance or repair work

Improper work on the speed controller can result in dangers such as a risk of burns, electric shock, or unpredictable behavior of the VARGA precision circular table saws.

- In the event of any faults or problems, contact the manufacturer's customer service.
- In the event of faults or problems of any kind, the speed controller must be properly dismantled and returned to the manufacturer.

8.2 Customer service

Manufacturer:	VARGA SYSTEM GmbH
Street:	Hainkämpe 5
Zip code, city:	28832 Achim
Country:	Deutschland
Telephone:	+49 4232 945870
Mail:	info@varga-system.com

9 Shutdown

Target group: Maintenance personnel

9.1 Temporary/permanent shutdown

Action required

1. Ensure that the precision circular table saw is switched off.
2. Disconnect the mains cable of the speed controller.

☑ *Power supply to the speed controller is disconnected.*

3. Disconnect the speed controller connector plug from the motor housing.

☑ *Power supply to the precision circular table saw is disconnected.*

4. Remove the connection cable from the cable retaining spring.
5. Wind up the cable and place the speed controller in a box.
6. Take the box with speed controller to its new storage location.

9.2 Storage during temporary shutdown

Observe the information on temporary shutdown in Section 9.1.

Proper storage guarantees a long service life.

Action required

- Only store the speed controller in closed, well-ventilated rooms.
- Protect the machine from dust.
- Take suitable corrosion protection measures for long-term storage.
- Keep the operating instructions in a safe place.

10 Disposal

Target group: Specialist personnel

10.1 Special safety instructions

ATTENTION

Environmental dangers from materials and substances

When disposing of the product and its individual components, materials and substances pose a danger to the environment.

➢ Separate materials by type and recycle in accordance with local regulations.

10.2 Disposing of the product

A defective speed controller can be disposed of using the method of disposal for electrical appliances after final shutdown.

If in doubt about the disposal method, contact the manufacturer or your local waste disposal company.

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