AFTER-SALES SERVICE
VEDA-IN ELECTRONIC DEVICES

SERVICE POLICY

VEDA-in DRIVES d.o.o.
Belgrade, 2024

Content

INTRODUCTION

This document sets out the main provisions for servicing VEDA-IN electronic devices in the territory of the European Union and Balkan region.

DEFINITIONS

VEDA-IN DRIVES is an organization engaged in the production of electronic devices and devices based on them in Serbia under the trademarks VEDA-IN RD, VEDA-IN SFT, VEDA-IN PLC, VEDA-IN HMI, VEDA-IN UPS and others

VEDA-IN electronic devices – frequency converters, soft starters, controllers and operator panels under the trademark VEDA-IN.

Authorized service partner of VEDA-IN DRIVES (*hereinafter* ***referred to as the SP***) – a company, including an employee (s), that is confirmed by VEDA-IN DRIVES to perform service for VEDA-IN electronic devices.

After-sales service (*hereinafter* ***referred to as Service***) – diagnostics, repair, replacement, configuration, and commissioning of VEDA-IN electronic devices.

Service case – a situation in which there is a need for service for VEDA-IN electronic devices.

The end user - the company that operates VEDA-IN electronic devices.

A Line/machine Manufacturing Company (*OEM*) is a company that manufactures original equipment (lines, assemblies) that uses VEDA-IN electronic devices.

1. ORGANIZATION OF THE SERVICE

1.1. SERVICE DIRECTION OF VEDA-IN DRIVES

1.1.1. SERVICE STRUCTURE

The basis of the service is a network of authorized service partners.

Service partners contact the end users who have contacted them to resolve service cases that have occurred.

Service of VEDA-IN electronic devices is organized in such a way that the end user is provided with high-quality and fast service in compliance with the warranty conditions, if they are received by him:

- via VEDA-IN DRIVES.
- through distributors (service partners);
- through line/machine suppliers (OEMs).

1.2. CATEGORIES OF THE SERVICE PROVIDED

1.2.1. BASIC SERVICE

Basic service is defined as work to restore the functionality of VEDA-IN electronic devices, both during the warranty and post-warranty period:

- device diagnostics.
- repair or replacement of devices.
- service session.

Providing a basic service is mandatory for any service partner.

1.2.2. ADDITIONAL SERVICE

Additional services provided by service partners include the following works and services:

- start-up and configuration of device parameters for the application;
- routine inspection of devices at the end user's enterprise;
- training in effective work with VEDA-IN electronic devices;
- analysis of the quality of the power supply network;
- Creating and optimizing spare parts.
- providing an extended warranty;
- providing a 24-hour "24/7" service;
- providing fixed response times in the event of a service event.
- provision of devices for rent;
- and others.

2. SERVICE OBLIGATIONS OF VEDA-IN DRIVES

2.1. WARRANTY SERVICE

Service of VEDA-IN electronic devices are carried out through its authorized service partners.

Warranty service includes diagnostics, subsequent repairs, or replacement with a similar device, but does not include compensation for the costs of transporting the device to and from the service center, visiting a service specialist at the device installation site, or putting the repaired (replaced) device into operation.

The decision on repair or replacement is made by authorized service partners.

The VEDA-IN DRIVES warranty does not apply to VEDA-IN electronic devices in the following cases:

- failure to comply with the rules for installation, connection, operation, storage or transportation of the device specified in the operating instructions of the device;
- disassembly or repair by unauthorized persons (not authorized service engineers);
- changes to the design of the device and other interventions that are not provided for in the operating instructions;
- the absence VEDA-IN of protection devices (high-speed fuses, etc.) at the input of VEDA-IN electronic devices or their incorrect selection;
- damage caused by extreme conditions and force majeure (fire, natural disasters, etc.);
- non-compliance with the parameters of power, telecommunications and cable networks, as well as environmental conditions specified in the operating instructions;
- ingress of foreign objects, dust, liquids, and corrosion into the internal working volumes of the device.
- if the device receives mechanical and/or thermal damage during operation.

Devices and spare parts that are replaced during warranty service are not refundable to the end user.

The standard warranty period is 24 months from the date of manufacture of the Devices, but not less than 12 months from the date of shipment of the Devices from the warehouse of VEDA-IN DRIVES.

VEDA-IN devices purchased from VEDA-IN DRIVES can be covered by an extended warranty of up to 60 months from the date of production.

2.2. SPARE PARTS

2.2.1. GENERAL INFORMATION ON SPARE PARTS

The device is repaired by modular replacement of its faulty components.
Only spare parts supplied by VEDA-IN DRIVES should be used for repairs.
Replacement of components on printed circuit boards is not allowed.

2.2.2. SPARE PARTS WARRANTY

The warranty period for spare parts installed during repair by a service partner is 6 months from the date of completion of the repair.

VEDA-IN DRIVES reserves the right to cancel the warranty for spare parts installed by persons who have not passed the appropriate authorization. Therefore, it is not recommended to sell spare parts to end users (for self-repair).

2.2.3. SPARE PARTS WAREHOUSES

In most cases, spare parts are used from the Belgrade warehouse of VEDA-IN DRIVES.

If the required spare parts are not available at the Belgrade warehouse, the order is placed at the manufacturer.

In addition to spare parts, the Belgrade warehouse of VEDA-IN DRIVES contains devices that can also be used to close service cases.

2.3. VEDA-IN Electronic Device Service Policy

2.3.1. GENERAL SERVICE POLICY FOR DEVICES

When making repairs, it is always necessary to take into account their economic feasibility. If the total cost of spare parts and work exceeds 70% of the cost of the device, it is recommended to replace the entire device.

Removable options (control panel, extension options) are changed separately in case of failure.

2.3.2. VEDA-IN RD	**2.3.3. VEDA-IN PLC**
Repairable	Complete replacement
2.3.4. VEDA-IN SFT	**2.3.5. VEDA-IN HMI**
Repairable	Complete replacement
2.3.6. VEDA-IN MVD	**2.3.7. VEDA-IN UPS**
Repairable	Repairable

3. PROCESSING THE BASIC SERVICE

3.1. PROCEDURE AND TERMS FOR CONDUCTING A SERVICE EVENT

1. **Within 12 hours** (during business hours) from the moment of receiving the service request (Appendix 1), the service partner determines the possibility/necessity of repairing or replacing the device (based on the information received) and informs the person who sent the request about the intended procedure and possible terms for closing the service case.
2. **Within 24 hours** (during business hours) from the moment of receiving the device, the service partner performs its diagnostics, determines the warranty status of the service case, and order codes for the required spare parts (or the entire device). If the case is guaranteed, places an order for them in VEDA-IN DRIVES and notifies the person who sent the request about the diagnostic result.
3. After receiving spare parts (replacement devices), the service partner makes repairs (replacements) within 10 business days and prepares the device for delivery to the end user, or agrees with the end user on the date of repair of the device at the place of its installation.

The repair period from the moment the service partner receives the device should not exceed 45 (forty-five) business days.

3.2. DEVICE IDENTIFICATION AND DIAGNOSTICS

3.2.1. DIAGNOSTICS

Device diagnostics includes visual inspection and instrumental control (static and dynamic tests) of the device in order to identify faulty elements.

Additionally, a search for the causes of failure can be performed.

Based on the results of diagnostics, a final conclusion is made on whether the case is guaranteed.

3.2.2. DETERMINING THE DATE OF MANUFACTURE OF VEDA-IN ELECTRONIC DEVICES

(The serial number (number, s/n) has the form *123456**M122***, where:

M – manufacturer

12 – week of production,

2 – year of manufacture.

*For example, the number 123456**M122** indicates that the device was manufactured in the 12th week of 2022.*

3.2.3. DETERMINING THE WARRANTY PERIOD FOR VEDA-IN ELECTRONIC DEVICES

To determine the warranty period, you must add the corresponding warranty period to the production week. In the case of a 24-month factory warranty, this is 2 years (one year is 52 weeks).

Examples for a 24-month warranty:

*For a device with serial number 123456**M122**, the last week of warranty is week 11, 2024.*

4. PROCESSING OF AN ADDITIONAL SERVICE

4.1. PUTTING DEVICES INTO OPERATION

4.1.1. GENERAL INFORMATION ON PUTTING VEDA-IN ELECTRONIC DEVICES INTO OPERATION

According to statistics, the failure rate of devices put into operation by service partners is incomparably lower than among those that were put into operation by end users. VEDA-IN DRIVES recommends that end users purchase devices on a turnkey basis, i.e. with subsequent commissioning.

4.2. ROUTINE DEVICE INSPECTION

4.2.1. RECOMMENDATIONS FOR ROUTINE INSPECTION OF VEDA-IN ELECTRONIC DEVICES

The average service life of VEDA-IN electronic devices is 10 years (with an operating time of 6000 hours per year). However, it should be taken into account that in some cases, the installation location of devices may not meet the requirements for the parameters of the power supply network and environmental conditions.

In this regard, the wear of some components of devices occurs faster than under the conditions corresponding to the nominal ones.

Dustiness primarily affects such components of the device as fans and radiators.

To ensure a long service life of the device, it is necessary to conduct a routine inspection and, if necessary, maintenance work.

4.2.2. LIST OF PREVENTIVE INSPECTION ACTIVITIES

1. General inspection to identify areas of overheating and poor connection contact.
2. Fan health check.
3. Cleaning / replacing fan filters-if necessary.
4. Check the tightening torques of contact connections (busbars, cables, terminals).
5. Check the DC bus capacitors, identify and correct performance degradation.
6. Check the balance of input and output currents and voltages.

Based on the results of the inspection, corrective measures are taken.

The recommended period of preventive inspections is once a year. If the device is operating in polluted environments, it is recommended to reduce this period.

VEDA-IN DRIVES recommends entrusting preventive inspections to its service partners.