

Instruction for Use Devices for low voltage emergency power supply (AC 1000 V)

11 15

#### 1 Devices for low voltage emergency power supply (AC 1000 V)



Please read this instruction for use prior to use of the device for emergency power supply, especially the safety hints! Keep the instruction for use to obtain information when necessary.

Please also observe the enclosed installation instruction of the manufacturer of the plug connectors for connection to the emergency power generator!

In case the device for emergency power supply is made available to another person, , hand over

the instruction for use together with the above mentioned installation instruction.

Due to the multitude of variations, your device for emergency power supply may differ from the following pictures.

#### 1.1 General

Fully-insulated devices for emergency power supply (emergency power devices) connect mobile (portable) emergency power generators with current circuits that need to be supplied.

Emergency power devices are admitted for use in low voltage systems (AC 1000 V) only!

## List of parts (see picture 1):

1) Connection lines according to DIN EN 50525 with plug connector for the emergency power generator (L1, L2, L3, PEN)

2) Connection elements for the supply end (3x NH-cartridge, 1x earthing clamp)

- 3) Handle for assembly of connection elements
- 4) Handle for assembly of connection lines

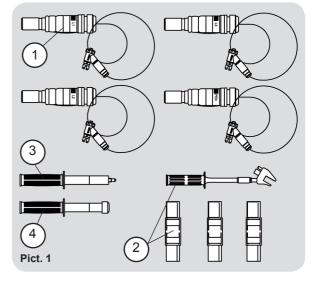
#### 1.2 Safety hints

- The emergency power device is to be used exclusively on portable emergency power generators according to DIN VDE 0100 part 200 with external star point. This is to be connected to the earthing system.
  - The emergency power device is to be used only for the rated current marked on the type label!
- The emergency power device is to be installed and connected by trained electrically skilled persons only! For use of the emergency power device, in order to prevent dangers, observe the:
- EN 50110-1 >>Operation of electrical installations and internal regulations as far as applicable! For live working use the complete provided personal protection equipment •
- For live working it is a must to use fully-insulated installation tools according to EN 60900 (Live working - Hand tools for use up to 1000 V AC and 1500 V DC).
- Only connect the emergency power device to the low voltage distribution or to generators within closed operating sites.
- Only use the emergency power device on electric installation parts which are disconnected and on which absence of voltage was verified!
- For connection of the emergency power device pay attention that all neighbouring live parts are covered!
- Please note that disconnected installation parts may have considerable residual voltages!
- Ensure that connections on the emergency power device are protected against unauthorised access!
- The emergency power device must not be used for earthing and short circuiting!
- The emergency power device is to be used only for the duration of emergency power supply! It is not suitable for permanent operation!
- When the emergency power device is installed on site, ensure that during installation and operation no • forces will come into effect at the connections of the emergency power device! Where required, use a strain-relief for the connection elements on the supply side. Unplugged and live connection parts pose a considerable safety hazard!

# ARCUS ELEKTROTECHNIK

Phone General +49 (0) 89 / 436 04-0 Fax General +49 (0) 89 / 431 68 88 Fax Sales Department +49 (0) 89 / 436 04 73

ALOIS SCHIFFMANN GMBH Seat of the Company Truderinger Str. 199 D-81673 Munich





Instruction for Use Devices for low voltage emergency power supply (AC 1000 V)

11.15

#### 1.2 Safety hints (continued)

 As the emergency power device may heat up considerably during operation, before removal it should first cool down after current was switched off

#### 1.3 Unpacking and examination

Packing of the emergency power device is designed to protect it from damages caused by normal impact and transport.

Unpack and examine the emergency power device as follows:

- · Unpack the emergency power device and make sure you have received all parts listed on the packing list.
- · Examine the device for damages from transportation.

In case packing is damaged and you have to expect damage or loss of supplied parts, this is to be noted on the delivery documents, otherwise insurance will not pay ! If shipment is packed orderly and parts are damaged or missing, please contact ARCUS Schiffmann.

#### 1.4 Storage, transport, maintenance and inspection

### Storage and transport:

The emergency power device is to be treated with care. Emergency power devices must be stored in dry and clean premises. Make sure that the device is protected against damages during transport.

## Maintenance and inspection:

Examine the emergency power devices regularly to make sure they are in faultless condition. The frequency and nature of these inspections depends on the specific conditions of application and storage.

A guideline for such inspections can also be found in Section 1.5 "Prior to each use".

We recommend conducting these inspections at annual intervals until you have gained sufficient knowledge to permit an extension of the intervals.

#### 1.5 Prior to each use

Before using the emergency power devices, examine them each time to make sure they are in faultless condition. Particular attention should be paid to the following:

Visual inspection: Check

- that the device is complete,
- the connecting parts for any damages,
- the O-ring on the connection element for the generator for damages, if necessary,
- that the contact of the connecting parts are clean,
- The sheath of the connection line for cracks and deformation, and discolouring due to overheating,
- Readability of markings, especially information about the rated current.

## Manual examination: Check

- to make sure all detachable connections are firmly tightened
- to make sure all moving parts are smooth running

## Caution:

If you detect any faults during one or more of these checks, at first take the device out of circulation.

#### 1.6 Intended usage



First connect the emergency power device to earth. When removing the devices, disconnect them from the earthing system as last step.

- Emergency power devices must only be used in electric installations with the rated currents for which they have been designed.
- It must be made sure that in case of a short circuit the emergency power generator will switch off after latest 5 s.
- Connection elements must only be connected to load and supply side when shaped for their form and dimensions.

# ARCUS ELEKTROTECHNIK

Phone General +49 (0) 89 / 436 04-0 Fax General +49 (0) 89 / 431 68 88 Fax Sales Department +49 (0) 89 / 436 04 73

ALOIS SCHIFFMANN GMBH Seat of the Company Truderinger Str 199 D-81673 Munich



Instruction for Use Devices for low voltage emergency power supply (AC 1000 V)

11.15

#### 1.6 Intended usage (continued)

Power supply of the emergency power device is secured only when the contact areas between connection elements and connection points are metallic bare and when the connection elements have been installed appropriately.

#### 1.7 **Technical data**

Environmental temperature range: -25 °C up to +55 °C Rated voltage: AC 1000 V

Cross section	Rated current
25 mm <sup>2</sup>	100 A
70 mm <sup>2</sup>	250 A

#### 2 Conditions of use

For use of the emergency power device it is a must to observe the regulations for use of the emergency power generator and those of the supply side of the low voltage installation!

#### 3 Installation of the emergency power device

- Examine the emergency power devices for their a) faultless condition before each use.
- b) Open the circuit breaker/ disconnector at the generator.
- C) Verify absence of voltage on the generator.
- Connect the PEN-connection line to the generator. d)
- e) Connect the connection lines L1, L2, and L3 to the generator.
- f) Select the suitable connection elements for the supply side, for instance NH-cartridges, threaded fuse inserts.
- On the supply side (at the transformer point, g) inside the cable distribution cabinet, at the service box, at cable ends) cover live neighbouring parts with suitable material.
- h) On the supply side connect the connection elements for PEN, L1, L2, L3 with the handle (h).
- i) Verify absence of voltage on the supply side.
- Connect the connection lines to the connection k) elements at the supply side with the handle (k) start with the PEN-connection!
- emergency Supply side power generator L1 L1 Ħ L2 12 Ħ (c) (e) L3 (d)PEN Pict. 2 Points a,b,f,g,I,m,n are not illustrated
- Test the direction of the rotating field and correct it if necessary. I)
- m) Make sure that no tensile forces affect the connection elements of the emergency power device. If required, use a tension relief for the connection elements on the supply side.
- n) Finally start up the generator following the operating instructions.

# ARCUS ELEKTROTECHNIK

Phone General +49 (0) 89 / 436 04-0 Fax General +49 (0) 89 / 431 68 88 Fax Sales Department +49 (0) 89 / 436 04 73

ALOIS SCHIFFMANN GMBH Seat of the Company Truderinger Str. 199 D-81673 Munich



# Instruction for Use

Devices for low voltage emergency power supply

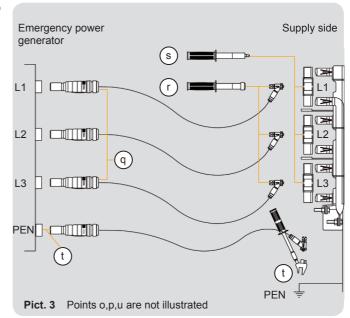
(AC 1000 V)

# A216GB-11.15

#### Dismounting of the emergency power device 4

- Shut down the generator following the operating O) instructions.
- Open the circuit breaker/ disconnector at the p) generator.
- q) Remove the connection lines L1, L2, L3 at the generator.
- r) Remove the connection lines L1, L2, L3 at the supply side with the handle (r).
- s) Remove the connection elements from L1, L2, L3 at the supply side with the handle (s).
- Remove the PEN-connection lines from the t) generator and from the supply side.
- Finally remove the tension relief from the u) connection elements on the supply side, if applicable.

#### 5 Malfunction, defects and damages



In case the emergency current device is damaged or a defect is found, first of all it is to be excluded from further use, and only after release through a gualified authority it is permitted for re-use.

#### 6 Available accessories

Only use equipment approved by Arcus Schiffmann!

#### 7 Disposal

Disposal of the emergency power device must comply with local regulations. ARCUS Schiffmann accepts no liability for incorrect disposal. Please do not hesitate to contact ARCUS Schiffmann if you require clarification about any of the materials used.

#### 8 Product liability and warranty

These instructions for use have been prepared with the greatest possible care and were reviewed prior to publication.

Warranty liability will only be accepted upon proof of compliance with the instructions for use in terms of storage, assembly, operation, maintenance and care.

# Attention:

Please note that tampering and modifications on the product on your own lead to safety hazards and to extinction of product liability.

Valid are the General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry.

#### q **CE-Conformity Declaration**

Your emergency power device fulfils the requirements of the EU-Directive: Low Voltage Directive 2014/35/EG

Conformity of the emergency power device with the above mentioned directive is confirmed by the CE-marking on your emergency power device.

# ARCUS ELEKTROTECHNIK

Phone General +49 (0) 89 / 436 04-0 Fax General +49 (0) 89 / 431 68 88 Fax Sales Department +49 (0) 89 / 436 04 73

ALOIS SCHIFFMANN GMBH Seat of the Company Truderinger Str. 199 D-81673 Munich