

TRANSFORMATOREN DROSSELN NETZGERÄTE

Transportation and Storage Note

For single- and three-phases transformers, reactors and DC power supplies

Transportation: temperature range for transportation -20°C ... +60°C

Our transformers, reactors and DC power supplies are depending on weight partly equipped with lifting lugs. All of the existing lifting lugs (2 or 4) have to be used simultaneously for safe transport. Also by mounting in housing they must be transported on the lifting lugs. Lifting just under the housing is not permitted. Transports with forklifts are only permitted by use of lifting equipment and with the help of the lifting lugs.

Pallets, wooden crates and containers may be lifted only at the indicated points.

During transportation on vehicles our transformers, reactors and DC power supplies are to secure against shifting according to the weight. For this the forwarding agent or his driver is responsible. While fastening is to ensure that the winding and connections (rectangular copper connectors) are not damaged or bend. Stacking is not permitted, also not with other goods. In case of visible evidence of damage immediately make complaint to the forwarding agent, if necessary, contact SBA.

Storage: temperature range for storage -20°C ... +60°C

Our transformers, reactors and DC power supplies must be stored in rainproof storage area. A cover with foil is recommended as protection against contamination, for example. Thereby it is important that there is no formation of condensation.

Packaging:

Our transformers, reactors and DC power supplies are not sensitive to natural humidity. Transportation over short distances, for example on covered vehicles, generally does not require additional packaging. For long overland transportations or sea transportations we recommend a foil cover and transport on a pallet, in a wooden crate or container. The transformers, reactors and DC power supplies must not be stacked, even if they are packaged. Beside this is explicitly permitted.

Processing of transport damage

We are always bothered to package our products in such a way that these arrives you free from defects!

Should there be unfortunately a transport damage please proceed as follows:

- 1. In case of **obvious damage** caused during transportation, it is necessary that you **not to accept the delivery as a receiver** or/and to indicate the damage immediately during acceptance of the product towards the carrier or the parcel service. It is very important to make notes about the damage on the delivery notes! Please, inform us about the damage as soon as possible. Also photos are always very helpful. Up to the final clarification please secure the damaged packaging material separately.
- 2. When you have confirmed the proper receipt of the shipment please check your goods immediately. Should you now notice Damages on your products, which were not visible from outside, please inform SBA immediately! Please be aware, that in this case it is difficult claim for compensation against the carrier. (This refers to your acknowledgment of receipt). Photos are always helpful. Please also secure packaging material separately. We will strive to make a quick clarification by mutual consent. It's possible, that we need a proof from you that declares that the product was not damaged in your area of responsibility.



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Installation and Operation Note

For transformers, reactors and DC power supplies

Installation:

It is important to ensure a fixed state of the transformer, reactor or DC power supplies. The substrate must be laid out for the weight of the transformer or reactor. Beside is to ensure sufficient ventilation in the location. Transformers and reactors that are already built into an enclosure can be operated without additional mounting on the ground. However, it is advisable to fix the enclosure in addition to the ground with suitable fixing material. For it holes are available in the U-profiles. Otherwise, the transformer or reactor could move independently by its natural vibrations from its stand.

Enclosures with protection index IP23 may not be exposed lateral or from bottom incoming water jets. Thereby water could penetrate into the enclosure and impact the functionality of the transformer or the reactor. The enclosure can tolerate at most only slight water spray in an angle of fall of 60° against the perpendicular.

Transformer, reactor and DC power supply should be exposed to no direct solar radiation and nearby no heat source. Otherwise, the maximum power must be reduced accordingly. Particularly for transformers or reactors in an enclosure of protection index IP54 is a shadowed installation location necessary.

Operation:

The general operating conditions for transformers, reactors and DC power supplies are valid according to DIN EN 61558 (VDE 0570) and VDE 0100.

Before starting, note the following:

- · check dirt, foreign bodies or waste of packaging and clean it if necessary
- connect protective conductor / grounding and check them
- check for correct connection of input and output
- check and tighten all screws of clamps and grounding bolts
- look for proper running of cables and that no live parts are touchable,
- check for enough ventilation and that existing cooling channels remain free
- · check mechanical connections for firm seat and tighten if necessary
- a sufficient overload and short-circuit protection on the output, and a short-circuit protection on the input must be installed by the customer or his installer. A recommended fuse is in the data sheet or on the label of the transformer or reactor.

All relevant safety regulations (VDE, EN, IEC, equipment protection, etc.) must be observed. This is part of our warranty conditions and in case of damage it must be verified by the user.

Transformers, reactors or DC power supplies of protection class IP00, which are realized with open connections (e.g., rectangular copper connectors), they must be adequately protected against accidental contact, to avoid the risk of electric shock, e.g., by installation in a suitable case or in the final product. Besides, the product standards appropriate for the respective final product must be considered.

Unauthorized product modifications can have influence on the operational safety and are not allowed without consultation.

Maintenance:

Our transformers, reactors and DC power supplies are largely maintenance free.

However, these should be checked in user-defined intervals to pollution and clean them if necessary. In particular, the existing cooling channels must be kept clear and should be cleaned from time to time. The cooling channels can be blown out with dry compressed air or sucked out, for example. At the cleaning work keep the applicable health and safety conditions. First the transformer or reactor should be turned off, so that no energized (live) parts can be touched accidentally.



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Tips regarding packaging

Please check first your local laws and regulations according waste disposal. These are only recommendations.

Carton packaging, corrugated board, wrapping paper

Disposal should occur preferentially in paper waste recycling/container

FOAM plus- foam padding

"Form Plus" foam padding does not contain any hazardous components.

Disposal should occur preferentially in the plastic recycling. Alternatively a disposal in thermal recycling is recommended. If these possibilities do not exist, the disposal is possible as industrial or domestic waste

Packaging Chips - EPS Material

The disposal should occur in container for mixed packaging, usually "yellow Container" in Germany.

One-Way Pallet (wood); Inka-Pallet

The disposal of Inca's Palettes and wooden Pallets or wooden packaging should occur according your local laws/regulations.

The installation requires a qualified person!