



EMC filters

Safety instructions

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Safety instructions

The table below summarizes the safety instructions that must be observed without fail. A detailed description can be found in the relevant documents *General information* and *Technical information*.

Topic	Instructions
Selecting a product	When selecting a product, it is mandatory to observe the rated data of the equipment (such as its rated input current, rated voltage, harmonic content etc.) as well as the derating instructions (see section 9 in document "Technical information").
Rated voltage	When power distribution systems deviating from the symmetric TN-S system it is to check the suitability of the products and the allowed voltages including the fault cases.
Protection from residual voltages Discharge resistors	Active parts must be discharged within 5 s to a voltage of less than 60 V (or 50 μ C). If this limit cannot be observed due to the operating mode, the hazardous point must be permanently marked in a clearly visible way. Products which are not permanently connected (e.g. when the test voltage is applied to the product at the incoming goods inspection) must be discharged after the voltage has been switched off.
Installing and removing of products Installation	When installing and removing our products, a voltage-free state must be set up and secured with observance of the five safety rules described in EN 50110-1.
Use in IT systems	The special features of the IT system ("first fault case" and other fault cases) shall be observed.
Safety notes on leakage currents	The product leakage currents specified in the datasheets are intended for user information only. The maximum leakage current of the entire electrical equipment or appliance has to be limited for safety reasons. Please obtain the applicable leakage current limits for your application from the relevant regulations, provisions and standards.
Voltage derating Hazards caused by overloading the products	If the permissible limits for the higher-frequency voltages at the product are exceeded, the product may be damaged or destroyed.
Current derating at elevated ambient temperatures	Non-observance of the current derating may lead to overheating and consequently represents a fire hazard.

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Protective earth connection at operating currents >250 A	For operating currents greater than 250 A, we recommend the PE connection to be set up between the feed (product: line) and output (product: load) not via the PE terminal bolt in the product housing.
Mounting position	Note the mounting position of the products! It must always be ensured that natural convection is not impaired.
Long motor cables	Long motor cables cause parasitic currents in the installation. The cable lengths indicated for the output chokes and output filters serve for orientation. The user must check the technical parameters and especially the choke temperatures for the respective application.