Mounting and Installation Guideline
AC Line Reactor RWK 3044 and RWK 3062

Please also read and follow the “General safety notes and installation guidelines”. More technical information of RWK 3044 and RWK 3062 can be found from the datasheets of the products available at www.schaffner.com.

Product designation of RWK 3044 and RWK 3062
The explanation of the product designation is shown in Figure 1.

RWK30n m-xxx-yy-E0 XXX

4: 400V rated voltage
6: 690V rated voltage

4: 4% impedance
2: 2% impedance

Rated current
Load-side terminal

For future options

Figure 1 Product designation

Filter placement and mounting
Lift the heavy reactors which have lifting eyes (>25kg) with appropriate lifting aids – smaller types may be lifted manually by two persons.

RWK 3044/RWK 3062 AC line reactor is a 3-phase device and must be positioned and wired in series to the input side of the VFD (Variable Frequency Drives). All terminals are marked. L1, L2, and L3 are the input terminals, which should be connected to the grid side. L1’, L2’, and L3’ have to be connected to the motor drive input side.

Important:
The mounting of RWK 3044/RWK 3062 shall be made on a metal plate which has a reliable protective earth (PE) connection.

Always connect RWK 3044/RWK 3062 to the protective earth (PE) first, and then continue with the wiring of line terminals. When decommissioning the RWK 3044/RWK 3062 remove the PE connection at the end.

RWK 3044/RWK 3062 reactors can reach surface temperatures up to 175°C when driven under maximum allowed load. Avoid burnings by waiting long enough after application is switched off.

Ambient temperature and clearance
RWK 3044 and RWK 3062 shall be installed where the ambient temperature does not exceed 45°C. Do not locate the reactor next to any other component with operating surface temperature above 125°C.

RWK 3044 and RWK 3062 reactors can be apply to max. 2000m altitude without derating, with derating (current and voltage) above 2000m according to IEC 60664-1.
RWK 3044/RWK 3062 reactors are designed to be floor-mounted or wall-mounted. In principle, the reactors shall be mounted vertically in order to respect a proper heat dissipation flow. To ensure an optimal ventilation and thermal radiation, it is recommended to leave enough space towards surrounding equipment, walls or components in all directions. For floor-mounting, clearance above the filter of >150mm and >50mm aside is required. For wall-mounting, clearance above and below the filter of >150mm and >50mm aside is required.

The recommended, permitted and prohibited mounting positions are shown in Figure 2 to Figure 5. The mounting on a vertical plate is limited to products with a maximum weight of 25kg. Larger reactors must be mounted in a horizontal position.

Use all available mounting holes and select the correct screws and washers (more information please find in product datasheet) in order to ensure a reliable mounting and take into account the weight of these products. Apply torques appropriate for the strength class of the screws and washers you are using. Specifications can be obtained from the supplier of the screws and washers.

Version history

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