

USER AND INSTALLATION MANUAL

3-Phase Line Reactor RWK3044 and RWK3062





Revision: 03 (January 2023)

English version (original instructions)

Please also read and follow the "General safety notes and installation guidelines" provided with the product. More technical information of RWK3044 and RWK3062 can be found from the datasheets of the products available at schaffner.com.

Version history

Revision	Date	Description
01	October 2018	Initial version
02	January 2020	Figure 5 Prohibited mounting positions updated
03	January 2023	New Schaffner branding template

Product designation of RWK 3044 and RWK 3062

The explanation of the product designation is shown in Figure 1.

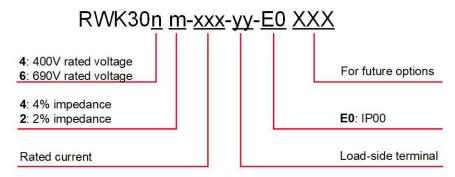


Figure 1 Product designation

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 are 3-phase devices 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' must be connected to the motor drive input side.



The mounting of RWK3044/RWK3062 shall be made on a metal plate which has a reliable protective earth (PE) connection.



Always connect RWK3044/RWK3062 to the protective earth (PE) first, and then continue with the wiring of line terminals. When decommissioning the RWK3044/RWK3062 remove the PE connection at the end.



RWK3044/RWK3062 reactors can reach surface temperatures up to 175°C when driven under maximum allowed load. Avoid burnings by waiting long enough after that the application is switched off.



Ambient temperature and clearance

RWK3044 and RWK3062 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.

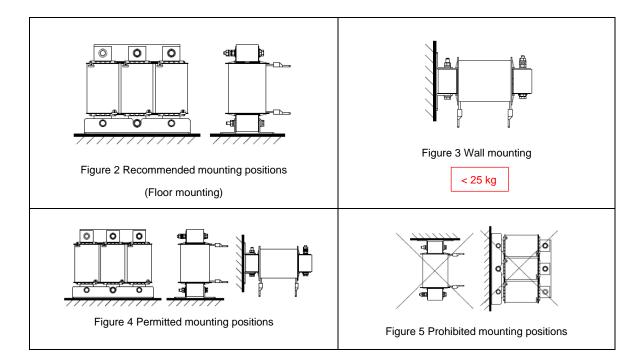
RWK3044 and RWK3062 reactors can be used to a maximum altitude of 2000m without derating, and with derating (current and voltage) above 2000m according to IEC 60664-1.



RWK3044/RWK3062 reactors are designed to be floor-mounted or wall-mounted. In principle, the reactors shall be mounted vertically 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 refer to the 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.



The information contained within this document and the functions offered are solely intended to provide information about products available for purchase from Schaffner group companies ("Schaffner") and do not constitute an offer for purchase or sale or a recommendation or advice. The content of this document has been carefully prepared and reviewed and all reasonable efforts have been made to ensure the accuracy of the information. However, Schaffner does not warrant the accuracy and does not assume any liability whatsoever for any errors or inaccuracies of this document and the consequences there of. Schaffner accepts no responsibility or liability for any losses or damages of any kind arising out of the use of this document or any of its related functions. Further, Schaffner cannot be held responsible for any errors or unexpected unfulfillment of shipments. Schaffner reserves the right to make changes to this document, the products, the published specifications and any other functions at any time without notice. Product suitability for any area of application must ultimately be determined by the customer. In all cases, products must never be operated outside their published specifications. Schaffner does not warrant, represent or guarantee the availability of any or all published products. The latest publications and product specification sheets as well as the current Schaffner general terms and conditions and data protection policy apply; these documents and the complete legal disclaimer can be downloaded from the Schaffner website. In order to improve readability, the masculine form is mainly used for people and personal nouns in this document. All references to persons apply equally to all genders. The abbreviated language form has only editorial reasons and does not imply any valuation.

All intellectual property rights, such as trademarks, tradenames, designs and copyrights, are reserved and are exclusively owned by Schaffner Holding AG. This document may exist also in other languages. This version is valid and binding.

This disclaimer shall be governed by substantive Swiss law and resulting disputes shall be settled by the courts at the place of business of Schaffner Holding AG.

© 2023 Schaffner Holding AG