RWK212 (AC Line Reactors)
RWK305 (Output Reactors)

Failure Analysis

August 2020
Failure Analysis

1. Intended use

| ! | The mounting of RWK305 shall be made on a metal plate which has a reliable protective earth (PE) connection. |
| ! | Always connect RWK212/305 to protective earth (PE) first, and then continue with the wiring of line terminals. When decommissioning the RWK212 / RWK305 remove the PE connection at the end. |
| ! | RWK212 / RWK305 reactors are designed to be floor-mounted or wall-mounted. The reactors shall in principle be mounted vertically in order to respect a proper heat dissipation flow. To ensure an optimum ventilation and thermal radiation, it is recommended to leave enough space towards surrounding equipment, walls or components in all directions. A minimum free space below and above the filter of >150 mm and >50 mm aside is required |

Note
More technical information of RWK 212 and RWK 305 can be found from the datasheets of the products available at www.schaffner.com.

2. Personnel qualification

Installation of the RWK212 /RWK305, inspections for proper operation, and certain troubleshooting measures may only be performed by qualified personnel. All other measures may be performed by people who have read these instructions.

Attention!
Before starting to work on the RWK, ensure that it is disconnected from the grid

1. Tool list (standard kit)
   - Camera
   - Multimeter (for example Fluke)
   - Screwdriver set
2. General condition

Take a picture of the label to get the RWK data.

- [ ] Label

Take a picture of the front including near surroundings, check the basic condition outside.

- [ ] Front
- [ ] Near surrounding
- [ ] Basic condition outside

3. Application & Installation

Specify the type & values of the load & external fuses or forward a schematic diagram.

Load: __________________________
Load Values: __________________

Check and indicate how the RWK is connected.

- U1,V1,W1 connected to PHF?
  Yes ☐  No ☐

- U2,V2,W2 connected to VSD?
  Yes ☐  No ☐

Specify the environmental conditions: Ambient temperature in °C & humidity. Also indicate device temperature during operation

Ambient temperature: _____ °C

Humidity:_______ %RH

Any other Schaffner filters are installed in same application:

Type & Qty:_______________________

No:           

Any other problems detected on these other filters, same/other problems happen in the past:

__________________________________
4. Measurements

In the case of an existing PQ meter, please perform a short term measurement about 10-15 Min. with logged values
- Voltage
- Current
- THDi
- Power
and provide the file with completed document to Schaffner
Note the name of used measurement equipment:
___________________________________

Perform the DC resistance measurement between U1-U2, V1-V2 and W1-W2.
Enter the measurement result:

1. _______ Ω
2. _______ Ω
3. _______ Ω

Perform the continuity test with multimeter between PE and each phase.
In the case of a passage, contact Schaffner Service.
Service Centers

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