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Code:

## Description

CIRCUTOR has a standard range of rejection reactors  $p = 7\%$ , with a resonance frequency of 189 Hz for 50 Hz networks (or 227 Hz on demand for 60 Hz networks). This is the most frequent tuning value to avoid any resonance of the 5th harmonic and higher. The capacitor-reactor assembly absorbs the portion of the current of the 5th order harmonic and acts as a detuned filter for higher frequencies. In some installations, other values of  $p\%$  are required, for example 5.6% (210 Hz), 6% (204 Hz), 14% (134 Hz), etc. CIRCUTOR can build reactors on demand, which will be adapted to any power rating,  $p\%$ , voltage and frequency. RX-type low-power reactors are built with low-loss plates and are coiled with a copper conductor. The connection is made using suitable terminals. In the case of higher power ratings, RBX reactors are used, with a magnetic plate nucleus with multiple air gaps, which offer excellent features and a very low loss ratio. Aluminium band coils are used (or copper band on demand) and the input and output connections run through a busbar. Both the RX and RBX reactors are impregnated with varnish in a vacuum to increase insulation, providing greater mechanical resistance and reducing noise levels.

## Application

The rejection reactors of the RX / RBX series have been specifically designed for use in capacitor banks in installations with a high harmonic content. The reactors must be connected in series to each capacitor to ensure adequate protection of the capacitors and to prevent resonance effects in the installation.



Code:

Specifications

AC power supply

|           |       |
|-----------|-------|
| Frequency | 50 Hz |
|-----------|-------|

Electrical characteristics

|                             |                                |
|-----------------------------|--------------------------------|
| Permanent overload          | 1,17 x In                      |
| Linearity (5% L)            | 1,8 x In                       |
| Maximum transient current   | 2 In (1 min)                   |
| Voltage                     | 400 V,on request: up to 1000 V |
| Tolerance L                 | ± 5 %                          |
| L value (mH)                | 1.63                           |
| Insulation voltage, circuit | 4 kV                           |

Electrical characteristic

|                          |               |
|--------------------------|---------------|
| Overvoltage factor (p %) | 14 % (134 Hz) |
|--------------------------|---------------|

Environmental characteristics

|                                   |   |
|-----------------------------------|---|
| Thermal Class                     | class F (+155 °C) On request: class H (+180 °C) |
| Protection class                  | IP 00   |
| Installation, location, position. | Inside  |
| Ambient temperature               | -10 ... +45 °C                                  |

Mechanical characteristics

|          |  |
|----------|--|
| Envelope | Conductor type: Aluminium strip / copper cable |
|----------|--|

Standards

|           |                         |
|-----------|-------------------------|
| Standards | UNE-EN 60289, IEC 60076 |
|-----------|-------------------------|

Protection

|                      |                    |
|----------------------|--------------------|
| Circuit breaker type | 90°C NC thermostat |
|----------------------|--------------------|