Compensated Choke, 1-phase

new



See below:
**Approvals and Compliances**

## Description
- Current compensated 1-phase choke
- Nanocrystalline cores
- THT-terminals
- Flange for mounting onto printed circuit board

## Unique Selling Proposition
- Very high inductance
- Compact design with a small footprint
- Open design optimizes heat dissipation
- Optional customized versions

## Applications
- Switching power supplies
- Medical equipment
- Laboratory equipment
- Test equipment
- Frequency inverters

## Weblinks
pdf data sheet, html datasheet, General Product Information, Approvals, Distributor-Stock-Check, Detailed request for product, SPICE Library, Landing Page

## Technical Data

| | |
|---|---|
| Rated voltage | 300 VAC |
| | 450 VDC |
| Rated Current | 0.5 - 10 A @ Ta 50 °C |
| Rated inductance | 0.9 - 180 mH, Tol. -30% +50% |
| Power Operating Frequency | 0 - 400 Hz |
| Terminal Type | THT |
| Weight | 8.5 - 9 g |
| Material | UL 94V-0 Plastic |

| | |
|---|---|
| Test Voltage | 1900 VDC, 2 sec, winding to winding |
| Climatic Category | 40/100/21 acc. to IEC 60068-1 |
| Allowable Operation Temp. | -40 °C to 100 °C |

## Approvals and Compliances

Detailed information on product approvals, code requirements, usage instructions and detailed test conditions can be looked up in Details about Approvals

SCHURTER products are designed for use in industrial environments. They have approvals from independent testing bodies according to national and international standards. Products with specific characteristics and requirements such as required in the automotive sector according to IATF 16949, medical technology according to ISO 13485 or in the aerospace industry can be offered exclusively with customer-specific, individual agreements by SCHURTER.

## Approvals

The approval mark is used by the testing authorities to certify compliance with the safety requirements placed on electronic products.

Approval Reference Type: DKCV

| Approval Logo | Certificates | Certification Body | Description |
|---|---|---|---|
| | VDE Approvals | VDE | VDE Certificate Number: 40059622 |
| | UL Approvals | UL | UR File Number: E495089 |

## Application standards

Application standards where the product can be used

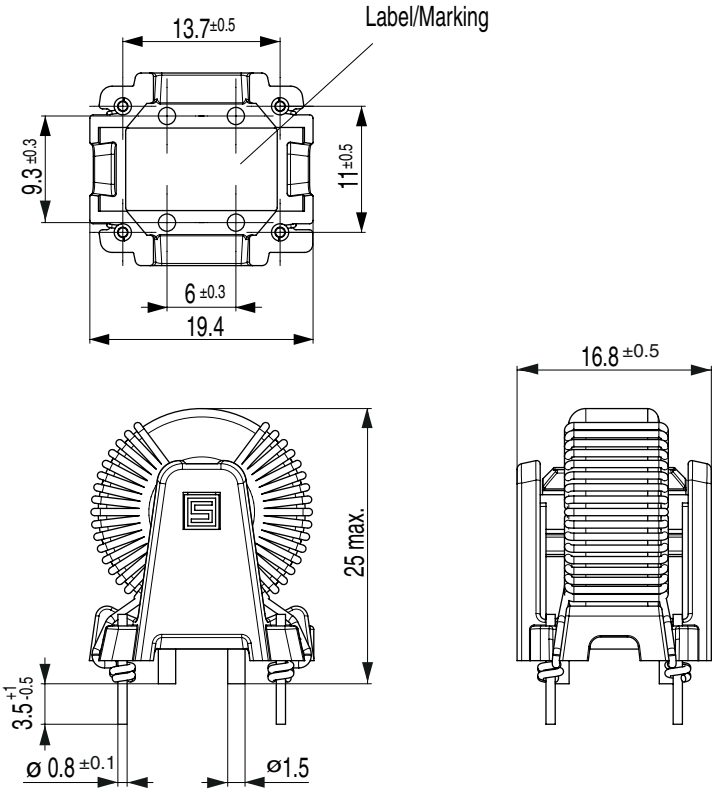
| Organization | Design | Standard | Description |
|---|---|---|---|
| IEC | Suitable for applications acc. | IEC/UL 62368-1 | Audio/video, information and communication technology equipment - Part 1: Safety requirements |

## Compliances

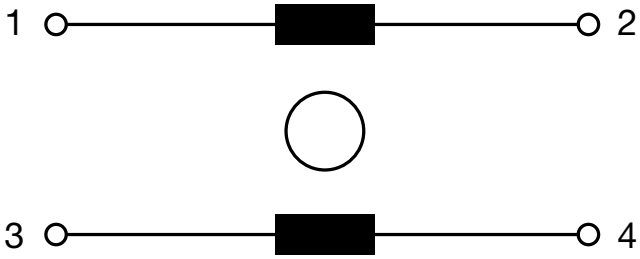
The product complies with following Guide Lines

| Identification | Details | Initiator | Description |
|---|---|---|---|
| CE | CE declaration of conformity | SCHURTER AG | The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008. |
| UKCA | UKCA declaration of conformity | SCHURTER AG | The UKCA marking declares that the product complies with the applicable requirements laid down in the British Amendment of Regulation (EC) 765/2008. |
| RoHS | RoHS | SCHURTER AG | Directive RoHS 2011/65/EU, Amendment (EU) 2015/863 |
| China RoHS | China RoHS | SCHURTER AG | The law SJ / T 11363-2006 (China RoHS) has been in force since 1 March 2007. It is similar to the EU directive RoHS. |
| REACH | REACH | SCHURTER AG | On 1 June 2007, Regulation (EC) No 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals 1 (abbreviated as "REACH") entered into force. |

## Dimensions [mm]



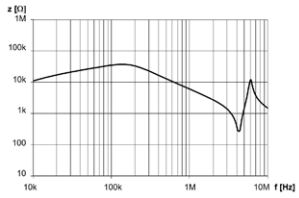

## Diagrams



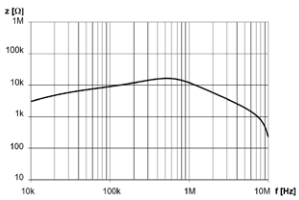

1 phase

## Impedance curves

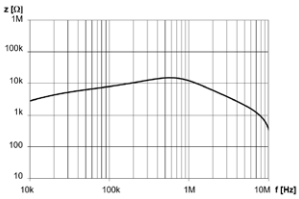
DKCV-1 / 0.5 A



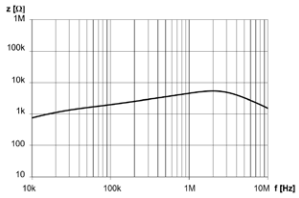

DKCV-1 / 1 A



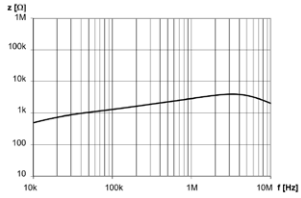

DKCV-1 / 2 A



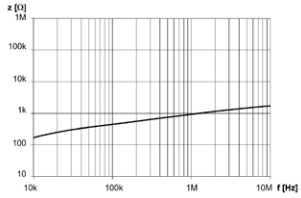

DKCV-1 / 3 A



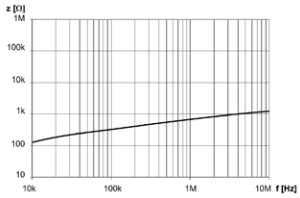

DKCV-1 / 4 A



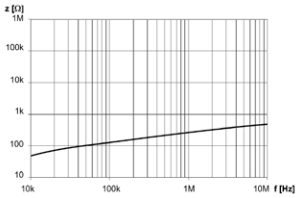

DKCV-1 / 6 A




DKCV-1 / 8 A




DKCV-1 / 10 A




## All Variants

| $I_n$ [A] | $L_n$ [mH] | $R_{cu}$ [mΩ] | Power Dissipation [W] | $f_{RES}$ [MHz] | Copper ø [mm] | Weight [g] | Packaging unit [PCS] | Order Number |
|---|---|---|---|---|---|---|---|---|
| 0.5 | 180 | 430 | 0.22 | 0.15 | 0.3 | 8.5 g | 180 | 3-137-414 |
| 1 | 55 | 155 | 0.31 | 0.53 | 0.375 | 8.5 g | 180 | 3-137-415 |
| 2 | 45 | 122 | 0.98 | 0.56 | 0.4 | 8.5 g | 180 | 3-137-416 |
| 3 | 12 | 23.7 | 0.43 | 2.05 | 0.63 | 9 g | 180 | 3-137-417 |
| 4 | 7.8 | 15.7 | 0.5 | 3.34 | 0.71 | 9 g | 180 | 3-137-418 |
| 6 | 2.7 | 5.7 | 0.41 | 19.9 | 0.9 | 9 g | 180 | 3-137-419 |
| 8 | 1.9 | 4 | 0.51 | 24.7 | 1 | 9 g | 180 | 3-137-420 |
| 10 | 0.9 | 1.85 | 0.37 | 50.3 | 1.25 | 9 g | 180 | 3-137-421 |

Availability for all products can be searched real-time: https://www.schurter.com/en/info-center/support-tools/stock-check-distributors



The specifications, descriptions and illustrations indicated in this document are based on current information. All content is subject to modifications and amendments. Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability and test each product selected for their own applications.