#### Compensated High Current Choke, 1-phase





See below:

### **Approvals and Compliances**

### **Description**

- Current compensated choke
- 1-phase choke
- THT-terminals
- Flange for mounting onto printed circuit board

### **Unique Selling Proposition**

- Compact size and light weight
- Open design optimizes heat dissipation
- Nanocrystalline (NK) or ferrite ring cores
- Customer specific pin outs available

#### **Applications**

- Frequency converter
- Charge stations
- UPS-systems
- Switching power supplies

#### References

Substitute for type DKIL-1

#### 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             | IEC, UL: 300 VAC           |  |  |  |  |
|---------------------------|----------------------------|--|--|--|--|
| -                         | CSA: 250 VAC               |  |  |  |  |
|                           | max. 425 VDC               |  |  |  |  |
| Rated Current             | 10 - 50 A @ Ta 40 °C       |  |  |  |  |
| Rated inductance          | 0.15 - 6.9 mH, Tol30% +50% |  |  |  |  |
| Power Operating Frequency | 0 - 400 Hz                 |  |  |  |  |
| Terminal Type             | THT                        |  |  |  |  |
| Weight                    | 30 - 115g                  |  |  |  |  |
| Material                  | UL 94V-0                   |  |  |  |  |
|                           |                            |  |  |  |  |

| Test Voltage              | 2500 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: DKIH-1

| Approval Logo   | Certificates  | Certification Body | Description                  |
|-----------------|---------------|--------------------|------------------------------|
| <b>1</b> 0      | VDE Approvals | VDE                | Certificate Number: 40043700 |
| c <b>FU</b> °us | UL Approvals  | UL                 | UR File Number: E72928       |

# **Application standards**

Application standards where the product can be used

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

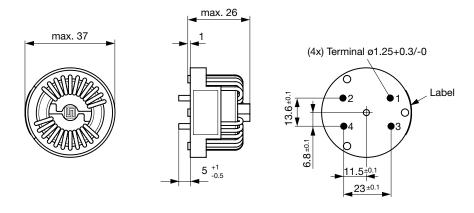
## Compliances

The product complies with following Guide Lines

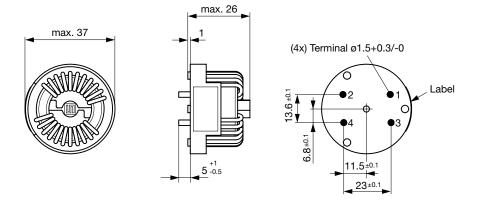
| Identification | Details                        | Initiator   | Description   |
|----------------|--------------------------------|-------------|---|
| C€             | CE declaration of conformity   | SCHURTER AG | The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008. |
| UK<br>CA       | 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  |
| <b>©</b>       | 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]

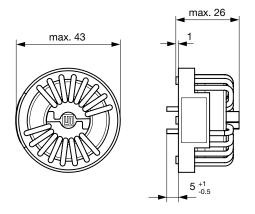
37-10

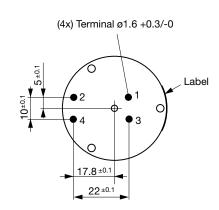


37-12

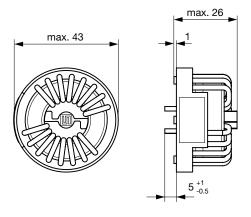


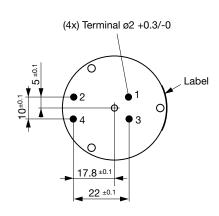
42-16



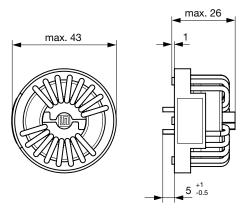


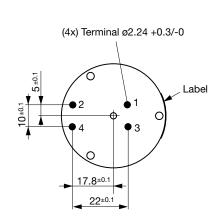
42-20



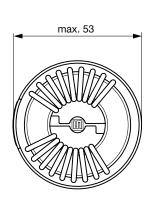


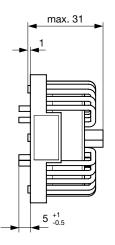
42-25

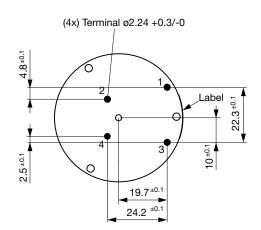




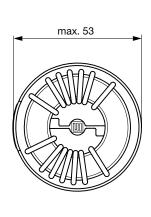
52-32

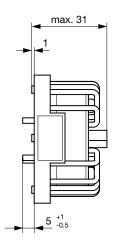


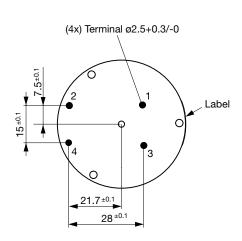




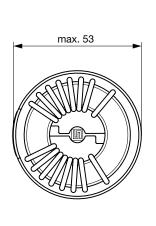
52-40

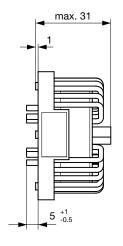


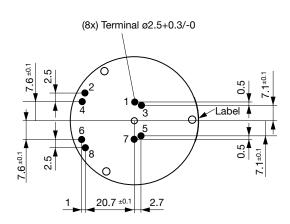




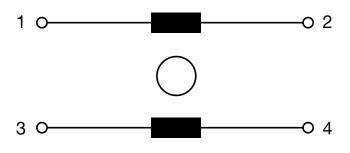
52-50







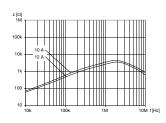
## **Diagrams**



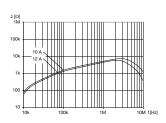
1 phase

### Impedance curves

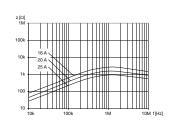
## DKIH-3237-xxxx



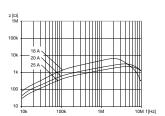
## DKIH-3237-xxxx-NK



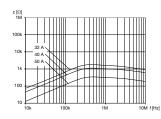
DKIH-3242-xxxx



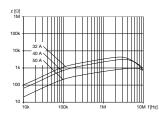
DKIH-3242-xxxx-NK



DKIH-3252-xxxx



DKIH-3252-xxxx-NK



## **All Variants**

| I <sub>n</sub> [A] | L <sub>n</sub> [mH] | $\mathbf{R}_{cu}$ [m $\Omega$ ] | Tripped Power Dissipation [W] | f <sub>RES</sub><br>[MHz] | Copper ø<br>[mm] | Weight<br>[g] | Housing | Packing unit [pcs.] | Order Number      |  |
|--------------------|---------------------|---------------------------------|-------------------------------|---------------------------|------------------|---------------|---------|---------------------|-------------------|--|
| 10                 | 0.8                 | 10                              | 2                             | 2                         | 1.25             | 30 g          | 37-10   | 40                  | DKIH-3237-10D8    |  |
| 10                 | 6.9                 | 10                              | 2                             | 2.2                       | 1.25             | 30 g          | 37-10   | 40                  | DKIH-3237-1010-NK |  |
| 12                 | 0.7                 | 7                               | 2                             | 2                         | 1.5              | 40 g          | 37-12   | 40                  | DKIH-3237-12D7    |  |
| 12                 | 6.8                 | 7                               | 2                             | 2.5                       | 1.5              | 40 g          | 37-12   | 40                  | DKIH-3237-122Q-NK |  |
| 16                 | 0.9                 | 5.6                             | 2.9                           | 1.5                       | 1.6              | 45 g          | 42-16   | 20                  | DKIH-3242-16D9    |  |
| 16                 | 6.9                 | 5.6                             | 2.9                           | 2                         | 1.6              | 45 g          | 42-16   | 20                  | DKIH-3242-160Q-NK |  |
| 20                 | 0.5                 | 2.5                             | 2                             | 1.5                       | 2                | 50 g          | 42-20   | 20                  | DKIH-3242-20D5    |  |
| 20                 | 3.7                 | 2.5                             | 2                             | 4                         | 2                | 50 g          | 42-20   | 20                  | DKIH-3242-202M-NK |  |
| 25                 | 0.3                 | 1.6                             | 2                             | 1.5                       | 2.24             | 50 g          | 42-25   | 20                  | DKIH-3242-25D3    |  |
| 25                 | 2.35                | 1.6                             | 2                             | 5                         | 2.24             | 50 g          | 42-25   | 20                  | DKIH-3242-257K-NK |  |
| 32                 | 0.75                | 2.3                             | 4.7                           | 0.4                       | 2.24             | 105 g         | 52-32   | 20                  | DKIH-3252-32D8    |  |
| 32                 | 7.2                 | 2.3                             | 4.7                           | 2.5                       | 2.24             | 105 g         | 52-32   | 20                  | DKIH-3252-324Q-NK |  |
| 40                 | 0.45                | 1.5                             | 4.8                           | 0.4                       | 2.5              | 115 g         | 52-40   | 20                  | DKIH-3252-40D5    |  |
| 40                 | 4.3                 | 1.5                             | 4.8                           | 3                         | 2.5              | 115 g         | 52-40   | 20                  | DKIH-3252-409M-NK |  |
| 50                 | 0.15                | 0.5                             | 2.5                           | 0.4                       | 2 x 2.5          | 115 g         | 52-50   | 20                  | DKIH-3252-50D2    |  |
| 50                 | 1.4                 | 0.5                             | 2.5                           | 6                         | 2 x 2.5          | 115 g         | 52-50   | 20                  | DKIH-3252-506J-NK |  |

Most Popular.

A vailability for all products can be searched real-time: https://www.schurter.com/en/Stock-Check/Stock-Check-SCHURTER



### **Accessories**

Description



EVB
Evaluation Board for DKIH-1 DKIH-3 and DKIV-1

**EMC Products**