

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 for optimal cooling
- Nanocrystalline 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 data sheet](#), [General Product Information](#), [Distributor-Stock-Check](#), [Detailed request for product](#), [SPICE Library](#), [Landing Page](#)

Technical Data

| | | | | |
|---------------------------|------------------------------|--------------|------------------------------------|-------------------------------|
| Rated voltage | IEC, UL: 300VAC | Test Voltage | 2500VDC, 2 sec, winding to winding | |
| | CSA: 250VAC | | Climatic Category | 40/100/21 acc. to IEC 60068-1 |
| | max. 425VDC | | | Allowable Operation Temp. |
| Rated Current | 10 - 50A @ Ta 40 °C | | | |
| Rated inductance | 0.15 - 6.9mH, Tol. -30% +50% | | | |
| Power Operating Frequency | 0 - 400Hz | | | |
| Terminal Type | THT | | | |
| Weight | 30 - 115g | | | |
| Material: Housing | UL 94V-0 | | | |

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 |
|---------------|-------------------------------|--------------------|------------------------------|
| | VDE Approvals | VDE | Certificate Number: 40043700 |
| | UL Approvals | UL | UL File Number: E72928 |





Application standards

Application standards where the product can be used

| Organization | Design | Standard | Description |
|--------------|--------------------------------|--------------|---|
| | Designed for applications acc. | IEC/UL 60950 | IEC 60950-1 includes the basic requirements for the safety of information technology equipment. |

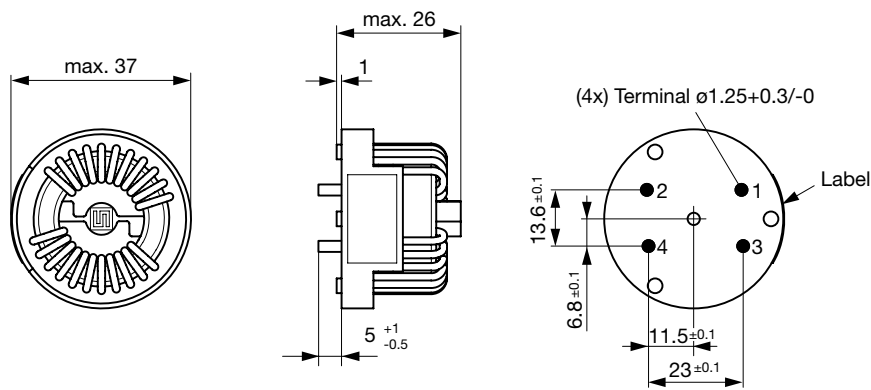
Compliances

The product complies with following Guide Lines

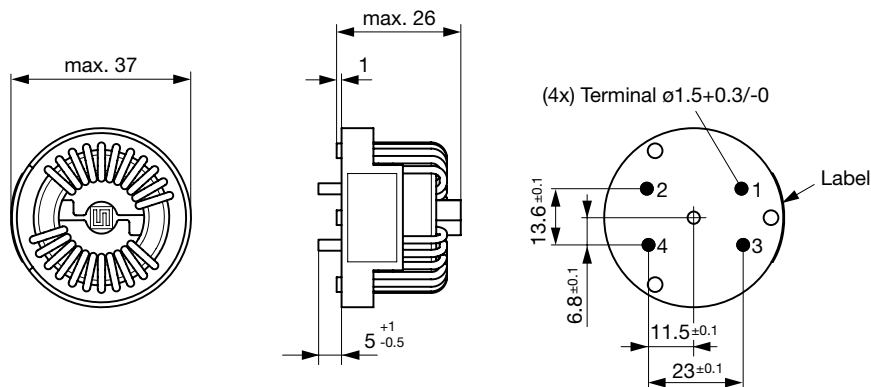
| Identification | Details | Initiator | Description |
|--|--|-------------|---|
|  | CE declaration of conformity | SCHURTER AG | The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008. |
|  | RoHS | SCHURTER AG | EU Directive RoHS 2011/65/EU |
|  | 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 | 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. |

Dimension [mm]

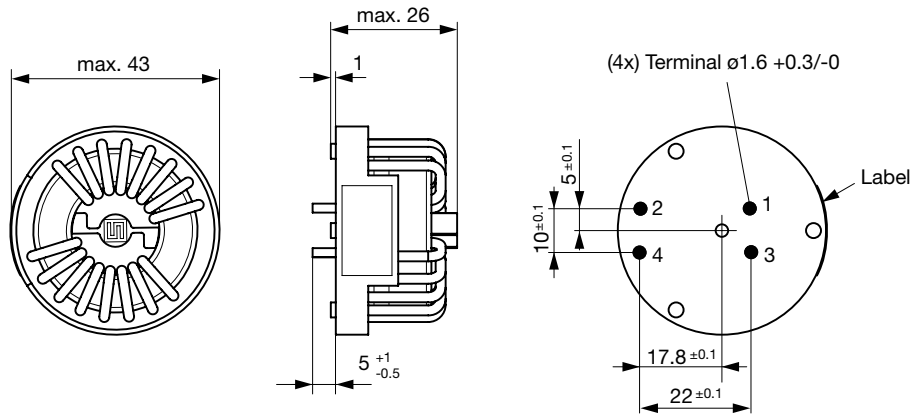
37-10



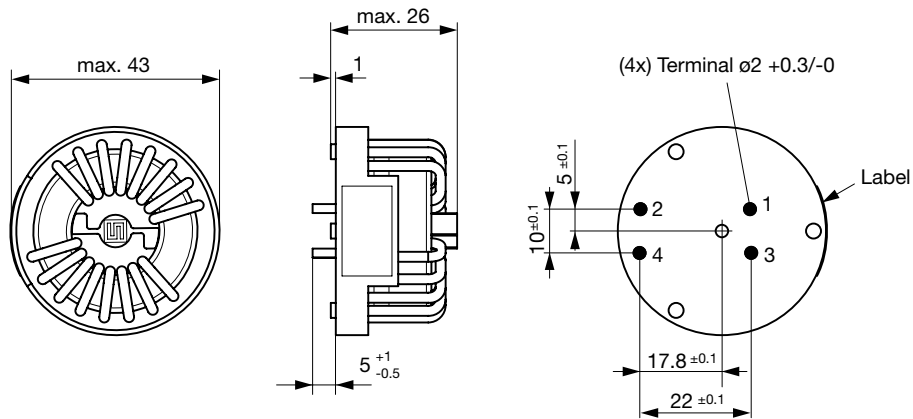
37-12



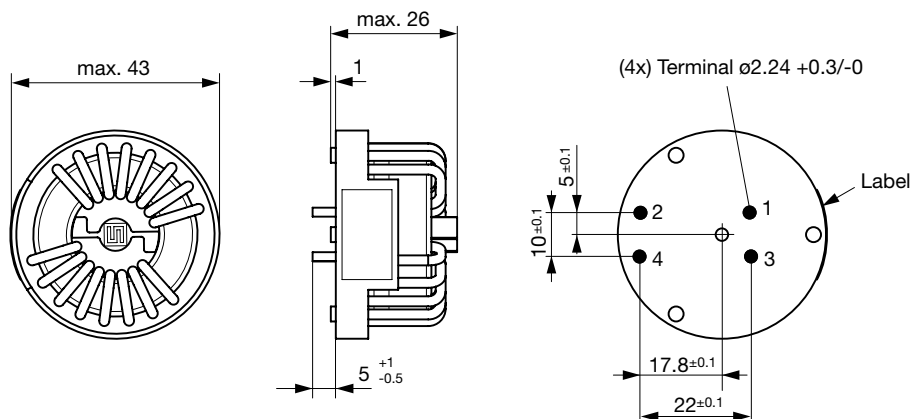
42-16



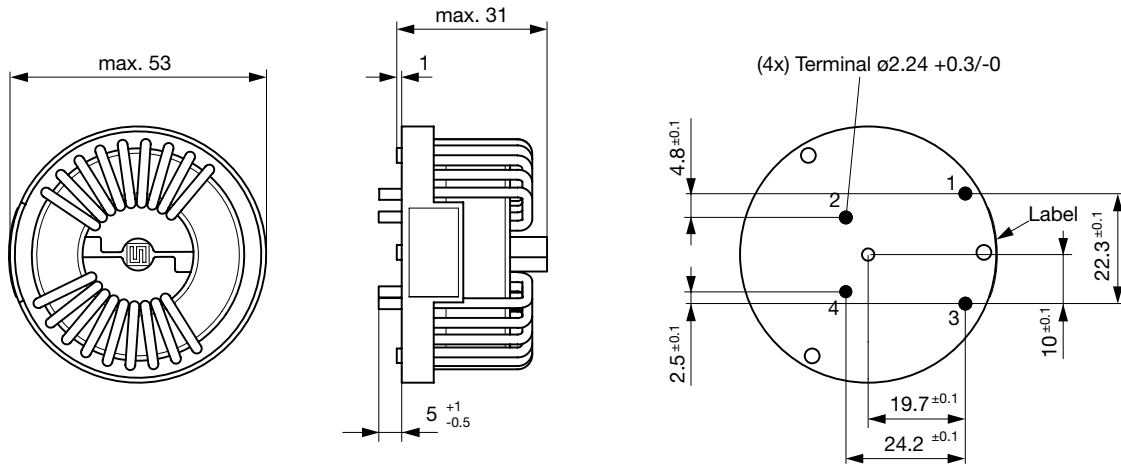
42-20



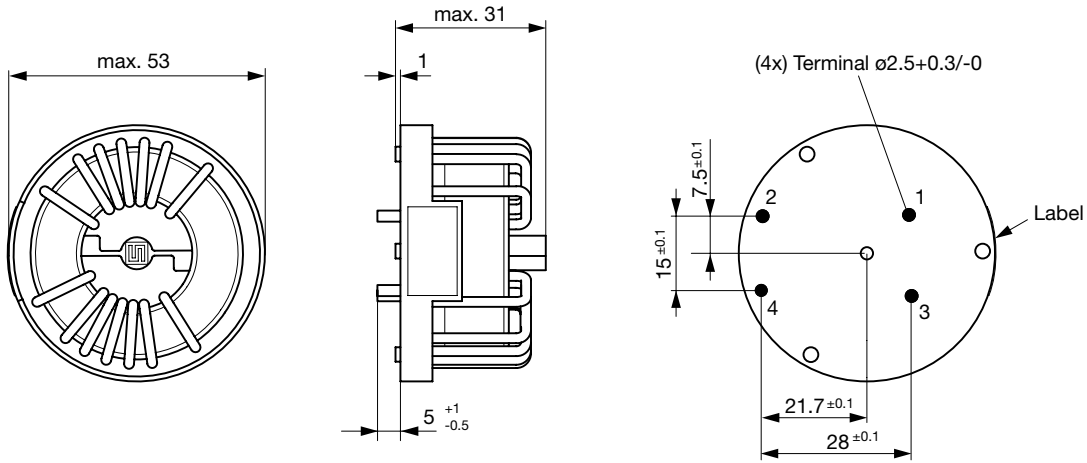
42-25



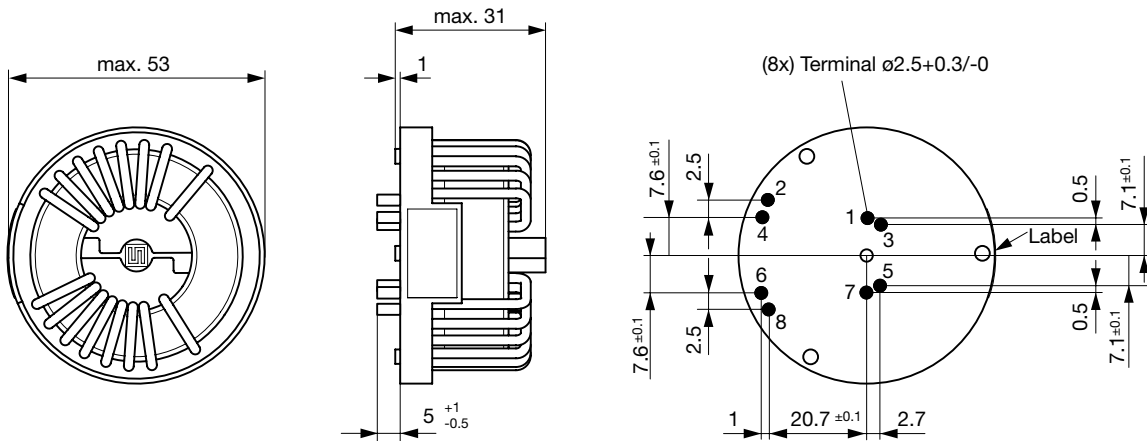
52-32



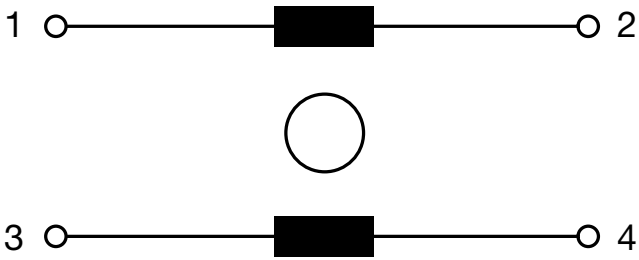
52-40



52-50



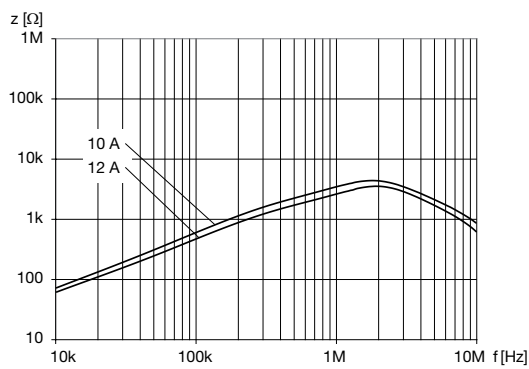
Diagrams



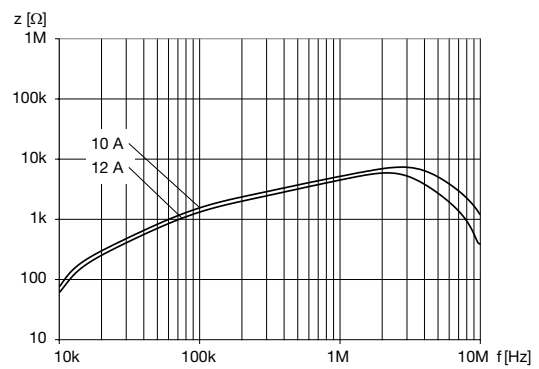
1 phase

Impedance curves

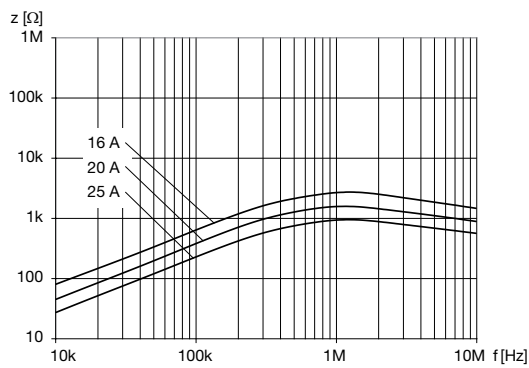
DKIH-3237-xxxx



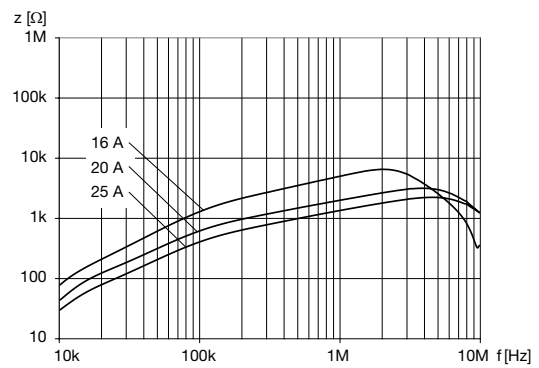
DKIH-3237-xxxx-NK



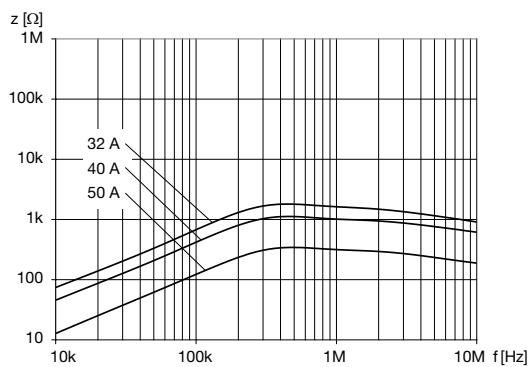
DKIH-3242-xxxx



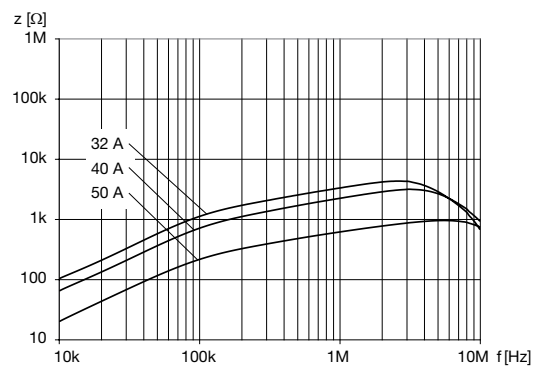
DKIH-3242-xxxx-NK



DKIH-3252-xxxx



DKIH-3252-xxxx-NK



All Variants

| I_n [A] | L_n [mH] | R_{Cu} [mΩ] | Tripped Power Dissipation [W] | f_{RES} [MHz] | Copper ϕ [mm] | Weight [g] | Housings | Packing unit [pcs.] | Order Number |
|-----------|------------|---------------|-------------------------------|-----------------|--------------------|------------|----------|---------------------|-------------------|
| 10 | 6.9 | 10 | 2 | 2.2 | 1.25 | 30 g | 37-10 | 40 | DKIH-3237-1010-NK |
| 10 | 0.8 | 10 | 2 | 2 | 1.25 | 30 g | 37-10 | 40 | DKIH-3237-10D8 |
| 12 | 6.8 | 7 | 2 | 2.5 | 1.5 | 40 g | 37-12 | 40 | DKIH-3237-122Q-NK |
| 12 | 0.7 | 7 | 2 | 2 | 1.5 | 40 g | 37-12 | 40 | DKIH-3237-12D7 |
| 16 | 6.9 | 5.6 | 2.9 | 2 | 1.6 | 45 g | 42-16 | 20 | DKIH-3242-160Q-NK |
| 16 | 0.9 | 5.6 | 2.9 | 1.5 | 1.6 | 45 g | 42-16 | 20 | DKIH-3242-16D9 |
| 20 | 3.7 | 2.5 | 2 | 4 | 2 | 50 g | 42-20 | 20 | DKIH-3242-202M-NK |
| 20 | 0.5 | 2.5 | 2 | 1.5 | 2 | 50 g | 42-20 | 20 | DKIH-3242-20D5 |
| 25 | 2.35 | 1.6 | 2 | 5 | 2.24 | 50 g | 42-25 | 20 | DKIH-3242-257K-NK |
| 25 | 0.3 | 1.6 | 2 | 1.5 | 2.24 | 50 g | 42-25 | 20 | DKIH-3242-25D3 |
| 32 | 7.2 | 2.3 | 4.7 | 2.5 | 2.24 | 105 g | 52-32 | 20 | DKIH-3252-324Q-NK |
| 32 | 0.75 | 2.3 | 4.7 | 0.4 | 2.24 | 105 g | 52-32 | 20 | DKIH-3252-32D8 |
| 40 | 4.3 | 1.5 | 4.8 | 3 | 2.5 | 115 g | 52-40 | 20 | DKIH-3252-409M-NK |
| 40 | 0.45 | 1.5 | 4.8 | 0.4 | 2.5 | 115 g | 52-40 | 20 | DKIH-3252-40D5 |
| 50 | 1.4 | 0.5 | 2.5 | 6 | 2 x 2.5 | 115 g | 52-50 | 20 | DKIH-3252-506J-NK |
| 50 | 0.15 | 0.5 | 2.5 | 0.4 | 2 x 2.5 | 115 g | 52-50 | 20 | DKIH-3252-50D2 |

Most Popular:

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

Accessories

Description



DKIH-EVB
Evaluation Board for DKIH-1