### 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: Housing	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
10	VDE Approvals	VDE	Certificate Number: 40043700
c <b>FL</b> °us	UL Approvals	UL	UL File Number: E72928

# **Application standards**

Application standards where the product can be used

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

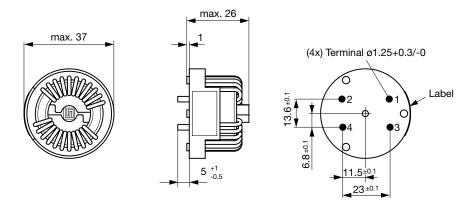
# Compliances

The product complies with following Guide Lines

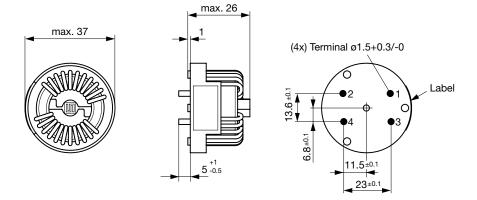
Identification	Details	Initiator	Description
C€	CE declaration of conformity	SCHURTER AG	The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008.
UK CA	UKCA declaration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

# Dimension [mm]

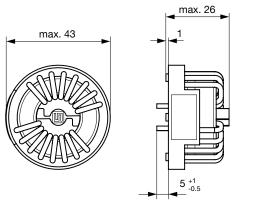
37-10

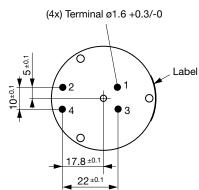


37-12

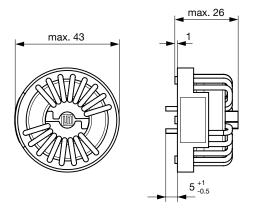


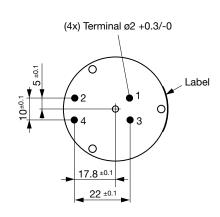
42-16



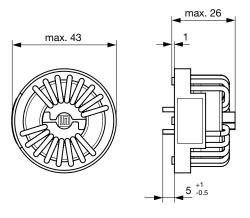


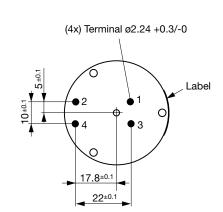
42-20



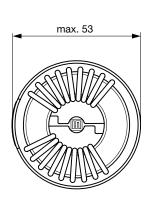


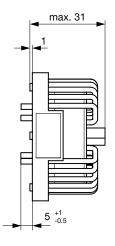
42-25

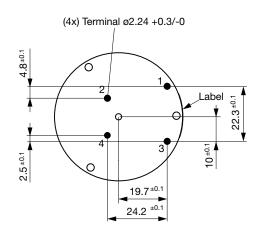




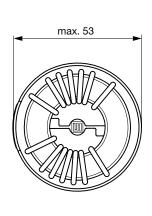
52-32

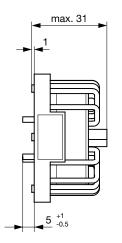


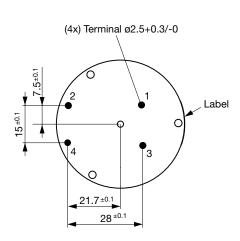




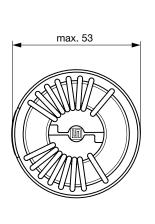
52-40

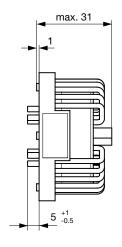


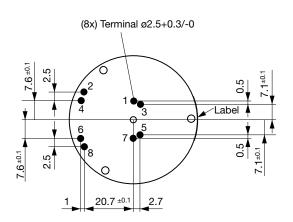




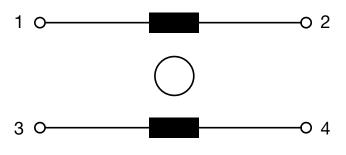
52-50







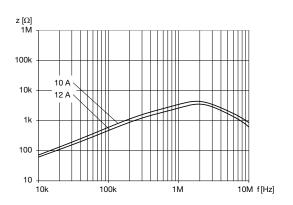
# **Diagrams**



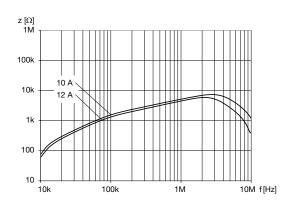
1 phase

## Impedance curves

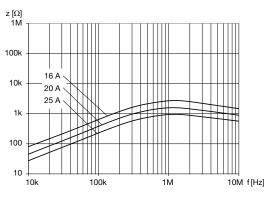
# DKIH-3237-xxxx



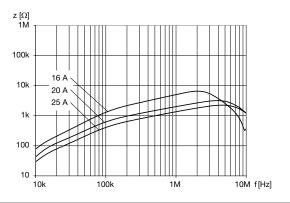
# DKIH-3237-xxxx-NK



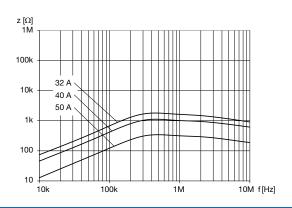
DKIH-3242-xxxx



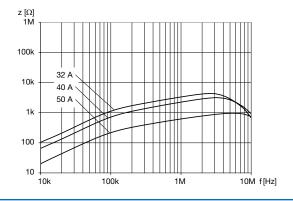
DKIH-3242-xxxx-NK



DKIH-3252-xxxx



DKIH-3252-xxxx-NK



# **All Variants**

I <sub>n</sub> [A]	L <sub>n</sub> [mH]	$\mathbf{R}_{\mathbf{cu}}$ [m $\Omega$ ]	Tripped Power Dissi- pation [W]	f <sub>RES</sub> [MHz]	Copper ø [mm]	Weight [g]	Housing	Packing unit [pcs.]	Order Number	
10	8.0	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.

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

## **Accessories**

### Description



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