Compensated High Current Choke, 1-phase





Description

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

Unique Selling Proposition

- Compact size and light weight
- Small footprint on PCB
- Open design optimizes heat dissipation
- Nanocrystalline or ferrite ring cores

See below: Approvals and Compliances

Applications

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

References

Alternative: Horizontal version DKIH-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. 450 VDC				
Rated Current	10 - 50A @ Ta 40 °C				
Rated inductance	0.15 - 8.2 mH, Tol30% +50%				
Power Operating Frequency	0 - 400 Hz				
Terminal Type	THT				
Weight	25 - 140g				
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: DKIV-1

Approval Logo	Certificates	Certification Body	Description
10	VDE Approvals	VDE	Certificate Number: 40052999
c FL [®] us	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

DKIV-1

20 ^{±0.2}

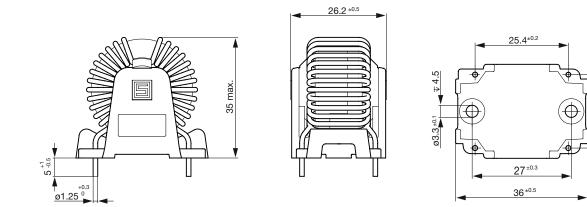
Compliances

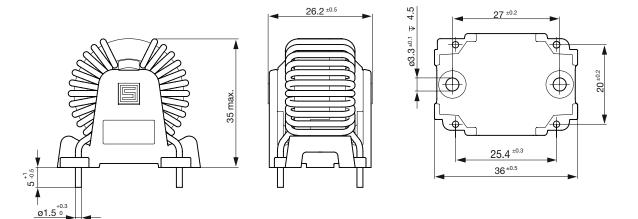
The product complies with following Guide Lines

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.
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
•	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.

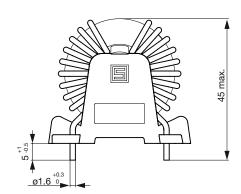
Dimension [mm]

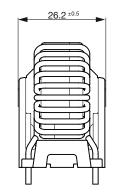
36-10

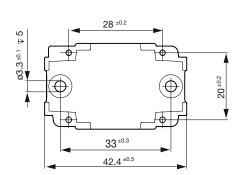




43-16

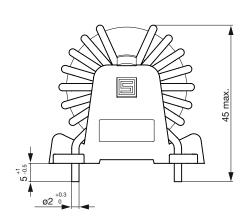


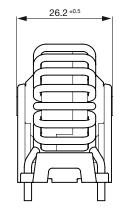


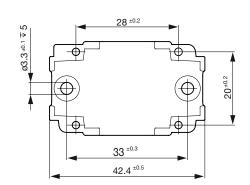


DKIV-1

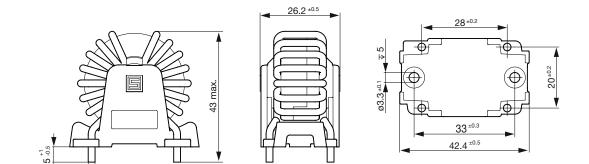
43-20



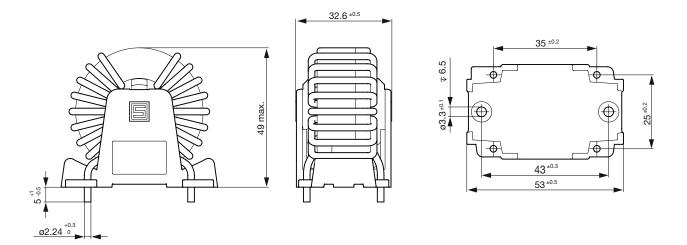




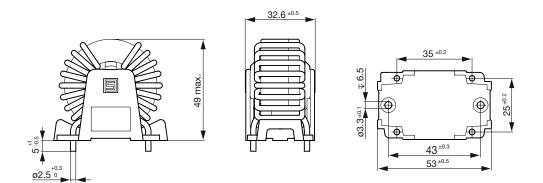
43-25



ø2.24^{+0.3}

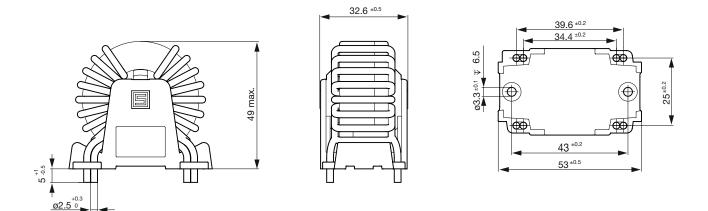


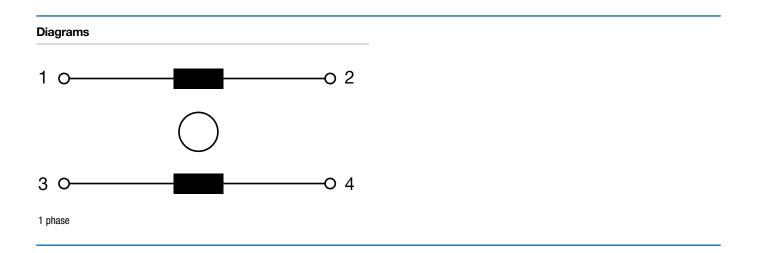
53-40



DKIV-1

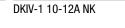
53-50





Impedance curves

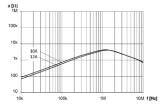
DKIV-1 10-12A



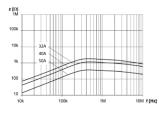
z [Ω] 1M

100k

10

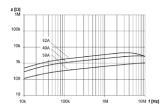


DKIV-1 32-50A



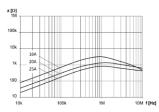
DKIV-1 32-50A NK

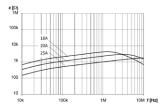
10A 12A



DKIV-1 16-25A

DKIV-1 16-25A NK





All Variants

I _n [A]	Nanocrystalline core [NK]	L _n [mH]	R _{cu} [mΩ]	Power Dissipa- tion [W]	f _{res} [MHz]	Copper ø [mm]	Weight [g]	Housing	Packing unit [pcs.]	Order Number	
10	-	1	10	2	1.19	1.25	25 g	36-10	40	3-127-596	
10	NK	8.2	10	2	0.97	1.25	35 g	36-10	40	3-127-620	
12	-	0.9	7	2.02	1.35	1.5	35 g	36-12	40	3-127-597	
12	NK	7.2	7	2.02	1.26	1.5	40 g	36-12	40	3-127-621	
16	-	0.9	5.7	2.92	0.91	1.6	50 g	43-16	40	3-127-598	
16	NK	7.3	5.7	2.92	1.26	1.6	50 g	43-16	40	3-127-622	
20	-	0.5	2.7	2.16	1.26	2	55 g	43-20	40	3-127-599	
20	NK	3.7	2.7	2.16	3.17	2	55 g	43-20	40	3-127-623	
25	-	0.23	1.7	2.13	1.04	2.24	55 g	43-25	40	3-127-600	
25	NK	1.8	1.7	2.13	10.3	2.24	55 g	43-25	40	3-127-624	
32	-	0.75	2.6	5.32	0.47	2.24	112 g	53-32	20	3-127-601	
32	NK	7.2	2.6	5.32	3.62	2.24	125 g	53-32	20	3-127-625	
40	-	0.45	1.7	5.44	0.5	2.5	112 g	53-40	20	3-127-614	
40	NK	4.3	1.7	5.44	6.54	2.5	125 g	53-40	20	3-127-626	
50	-	0.15	0.5	2.5	0.47	2 x 2.5	125 g	53-50	20	3-127-619	
50	NK	1.4	0.5	2.5	13.46	2 x 2.5	140 g	53-50	20	3-127-627	

Most Popular.

product selected for their own applications.

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

SCHURTER | 7 |

ELECTRONIC COMPONENTS

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Schurter:

<u>3-127-596</u> <u>3-127-597</u> <u>3-127-598</u> <u>3-127-599</u> <u>3-127-600</u> <u>3-127-623</u> <u>3-127-624</u> <u>3-127-625</u> <u>3-127-626</u> <u>3-127-666</u> <u>3-127-6666</u> <u>3-127-666</u> <u>3-127-666</u> <u>3-127-666</u> <u>3-12</u>