



DEHN + SÖHNE

# DEHNventil® Future starts here.



# These are the parts of it . . .

**DEHNventil®:**  
**The Future Component.**

DEHNventil® a product of  
DEHN + SÖHNE, the specialist  
for heavy duty surge protection.



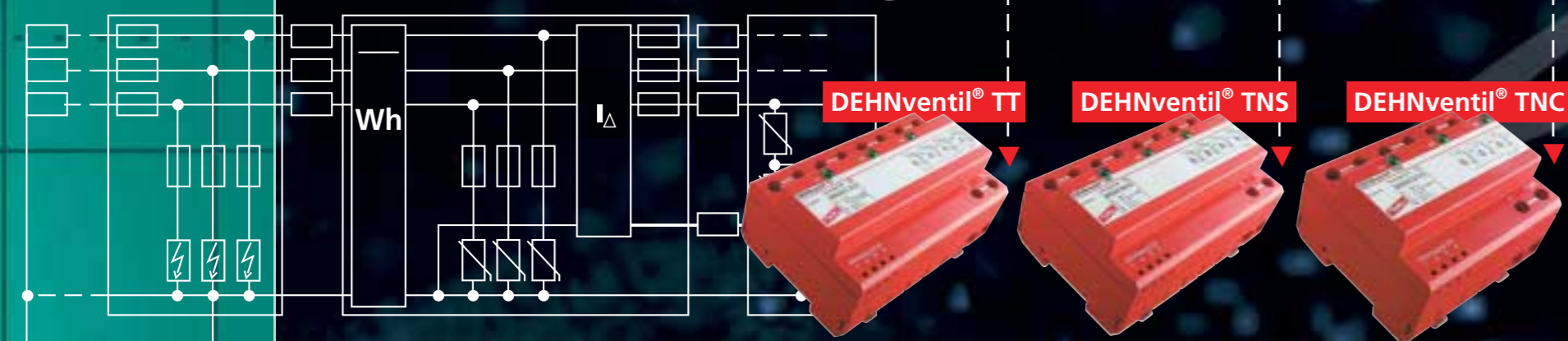
**DEHNventil®:**  
**Progress in Development.**

DEHNventil® an innovative  
component, unifying both  
lightning current arrester and  
surge arrester.

The perfect all-in-one solution.  
A complete device ready for  
installation for all common  
types of power supply systems  
(TN-C, TN-S, TT)!



# Safety - All-in-One.



## DEHNventil®: Surge Protection - Easy to Select.

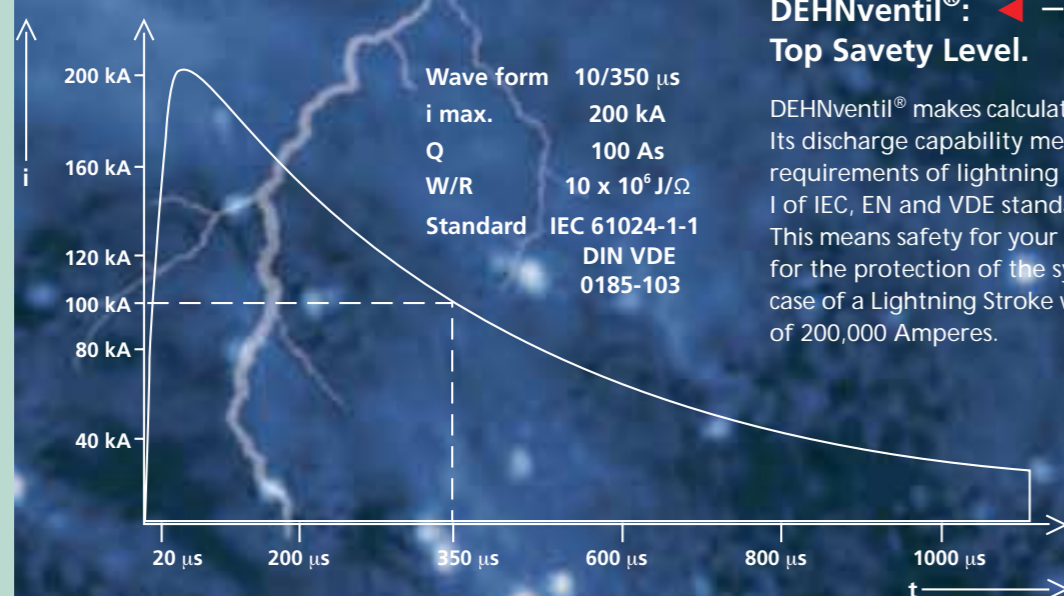
No matter which type of power supply system needs protection - the product designation of DEHNventil® will guide you to the right solution.

## DEHNventil®: Easy and Cost Saving Installation.

Savings are the big benefit of the DEHNventil® Family: Up to 70 % of space are saved in comparison with other common devices. Because of the the DEHNventil®s small dimensions a large amount of space is saved in control panels / enclosures.

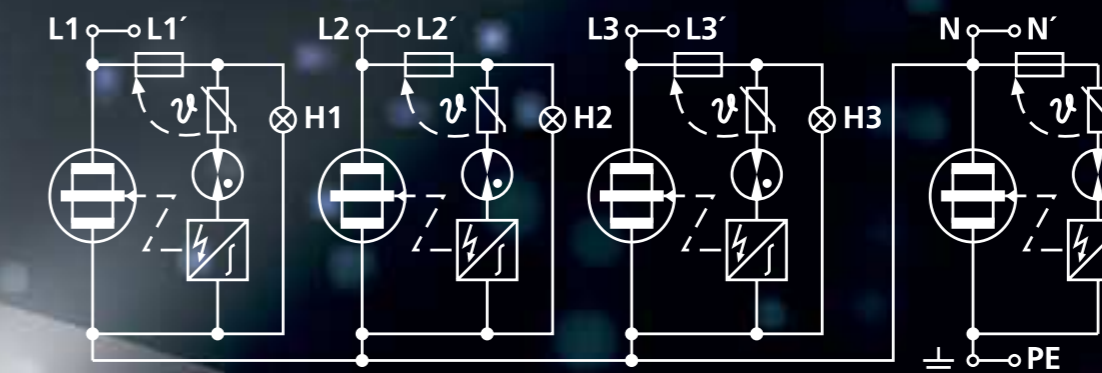
## DEHNventil®: Top Safety Level.

DEHNventil® makes calculation unnecessary: Its discharge capability meets the highest requirements of lightning protection level I of IEC, EN and VDE standards. This means safety for your choice as well as for the protection of the system, even in case of a Lightning Stroke with an intensity of 200,000 Amperes.



## DEHNventil®: ICE-Technology

Surge Protection of the Future: Integrated, Coordinated, Encapsulated: ICE



## DEHNventil®: No Leakage Current.

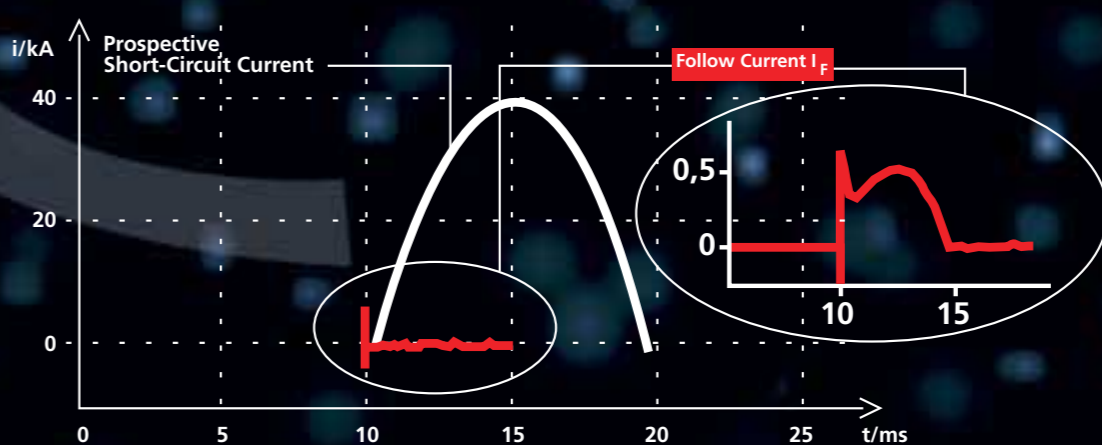
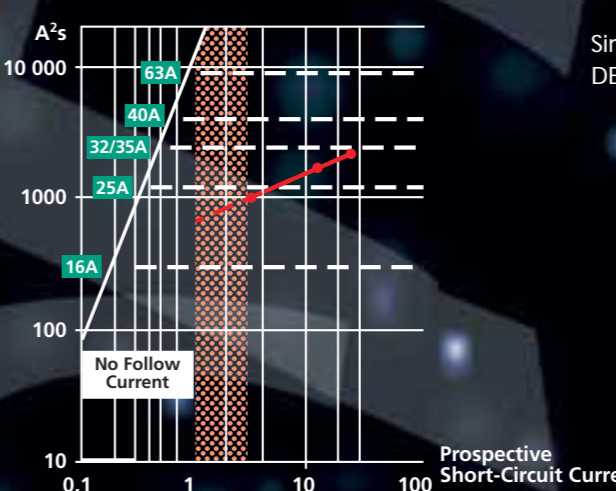
DEHNventil® has no leakage current. This allows the application of the device upstream of the meter. Even the insulation test of the system (U = 500 Vdc) does not interfere with DEHNventil®, no disconnection for the test is necessary!

## DEHNventil®: Freedom of Installation.

Similar to the approved encapsulated DEHNbloc®, DEHNventil® employs creepage discharge spark gap technology, DEHNventil® devices can be integrated into small distribution cabinets without any further requirements.

## DEHNventil®: Security of Supply.

The limiting of the follow current with DEHNventil® and its patented RADAX-FLOW TECHNOLOGY a 32 A gL/gG fuse will not trip. Not even in the case of 25 kArms prospective short-circuit currents. That means: Security of supply.



## DEHNventil®: Protection Compact.

DEHNventil® Lightning Current Arrester (class B) and Surge Arrester (class C) in one(!) and it only needs the space of 6 or 8 modules. No additional decoupling is required. DEHNventil® is coordinated with surge arresters (class C and D) of the RED/LINE product family as well as directly with the terminal input (U<sub>n</sub> = 230 V).



## DEHNventil®: Double Terminals.

The connection can be made simple and easy by using the twin terminals. No additional terminal blocks are necessary for load currents less or equal than 125 A at all. The additional bus bar terminal at the output increases the combination possibilities with other DINrail mounted components.



## DEHNventil®: Operating Voltage Indication.

The combined functional and operating voltage indication shows the presence of mains voltage and availability of the DEHNventil®.



## DEHNventil®: Remote Monitoring Module.

With the option of the remote monitoring module DEHNsignal DV you are informed about the state of the protection even if you are not on site.



## DEHNventil®: Additional Earth Terminal.

All DEHNventil® devices have an additional earth terminal. This allows a safe connection to the main earth busbar as well as a short connection to the protective conductor of the power supply system.

## DEHNventil®: Technical Data (Lightning Current Arrester and Surge Arrester).

DEHNventil® ...	TNC	TNS	TT	2PTN	2PT TT
Test standards		Ableiter der Anforderungsklasse B acc. to E DIN VDE 0675-6, -6/A1, -6/A2 SPD Type 1 acc. to EN 61643-11 SPD class I acc. to IEC 61643-1 255 V / 50 Hz			
Rated voltage (max. continuous operating voltage) U <sub>c</sub>		255 V			
Follow current ext. capability at U <sub>c</sub> I <sub>f</sub>		50 kA <sub>Arms</sub>			
Total lightning imp. current (10/350) I <sub>imp</sub>	75 kA	100 kA	100 kA	50 kA	50 kA
Voltage protection level U <sub>p</sub>		≤ 1.5 kV			
Response time t <sub>A</sub>		≤ 100 ns			
Back-up fuse, (only necessary if not already provided in mains) Short-circuit withstand capability with max. back-up fuse Ambient temperature range ϑ		315 A (Parallel Connection) 125 A (Series Connection) 50 kA <sub>Arms</sub> -40° C ... +60° C (Series Connection) -40° C ... +80° C (Parallel Connection) min. 10 mm <sup>2</sup> solid / flexible			
Conductor size		max. 50 mm <sup>2</sup> stranded / 35 mm <sup>2</sup> flexible (L1, L2, L3, (N), PE(N)) (L, N, PE) max. 35 mm <sup>2</sup> stranded / 25 mm <sup>2</sup> flexible (L1, L2, L3, (N), PE(N)) (L, N, PE) 35 mm DINrail in accordance with EN 50 022 red glass-fibre reinforced UL 94-V0			
Installation on Housing material Degree of protection Dimension (DIN 43 880) Functional indication for Approved by Test standards	6 TE	8 TE	8 TE	6 TE	8 TE
		L1, L2, L3			
		VDE			
		E DIN VDE 0675-6, -6/A1, -6/A2 EN 61643-11 IEC 61643-1			
DEHNventil® Type	Version	Part No.			
DV TNC 255	3-pole for TN-C	900 373			
DV TNS 255	4-pole for TN(C)-S	900 374			
DV TT 255	4-pole for TT	900 375			
DV 2P TN 255	2-pole for TN	900 371			
DV 2P TT 255	2-pole for TT	900 370			
Remote Monitoring Module for DEHNventil® TNC/...TNS/...TT Type	Version	Part No.			
DSI DV	2-pole for TNC/...TNS/...TT	910 620			
DSI DV 2P	2-pole for 2P TN...TT	910 621			
DSI E DV	Reception Module	910 630			



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## More Information Material

I would like to have more information material about the following topics:

- Surge Protection - Main Catalogue
- List of all DEHN publications
- Please arrange for a visit of one of your Sales Engineers (by appointment).

Name .....

Company .....

Address .....

Country .....

Phone .....

Fax .....

eMail .....

Post of fax us the above coupon.  
The information material will be directly sent to you.

**Lightning Protection  
Surge Protection  
Safety Equipment**

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