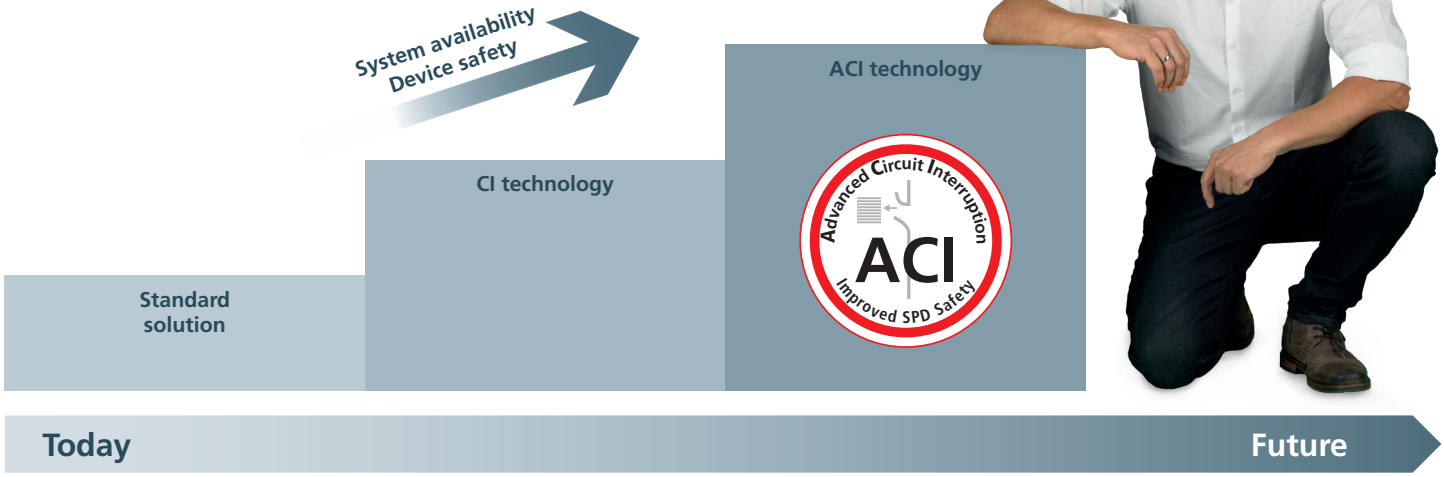
New: ACI Technology

Safety at the highest level!

Equipped for the future: Surge protection with ACI technology

The new ACI technology – Advanced Circuit Interruption – stands for the highest level of device safety and system availability.
With its new integrated switch/spark gap combination, ACI technology has current and future requirements well under control: Making sure surge protective devices function reliably and systems are always available.



Your benefits with DEHNguard ACI:

Safe dimensioning: Eliminate mistakes
With ACI arresters you avoid those configuration errors made when selecting and dimensioning a suitable backup fuse. This increases the availability of your system. The new switch/spark gap combination is integrated directly in and ideally adjusted to the arrester. No time and effort need be spent on selecting the right fuse size and tripping characteristics.

TOV withstand: Increase system availability
Temporary overvoltages (e.g., caused by loss of neutral) can destroy conventional surge protective devices. The new ACI arresters have a much better TOV withstand. This increases the availability of your system and avoids wasting time and money on repairs.

Zero leakage current: Increase the service lifetime of arresters
The technology in an ACI makes sure that there are no leakage currents. This prevents premature ageing and saves the time and expense of replacing arresters ahead of schedule. ACI arresters also prevent the accidental tripping of the insulation monitoring and contribute towards operational safety.

Connection cross-section of only 6 mm²: Easier to install [1)]
A conductor cross-section of just 6 mm² is always enough. You save the valuable time you would, in the past, have spent dimensioning the cross-sections. 6 mm² also makes installation easier because the radiuses are smaller and the wiring shorter.

[1)] All live conductors should be wired so that they are inherently short-circuit and earth fault proof.

Transition in the energy sector: Fulfil future requirements
The global power supply is in a period of transition. Renewable power generation is creating new grid parameters. Isolated grids and storage systems are changing the short-circuiting conditions. With ACI technology you are well-equipped for these future requirements.

www.dehn-international.com

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Advantages of DEHNguard® S / M ACI 275 (Type 2 arrester)

For highest system availability: DEHNguard ACI

	Standard solution	CI technology	ACI technology	
Safe dimensioning	—	—	✓	ACI = Highest system availability
Smaller connection cross-section of 6 mm² always sufficient [1]	—	—	✓	
Longer service life due to TOV withstand and zero leakage current	—	—	✓	
Monitoring overcurrent protection SPD	—	✓	✓	
More space in the switchgear cabinet	—	✓	✓	
No external backup fuse needed	—	✓	✓	
Thermo Dynamic Control	✓	✓	✓	
Protective effect of a type 2 arrester	✓	✓	✓	

A further plus point is that your system always stays up and running:
With ACI, tripping backup fuses and the need to reconnect are a thing of the past.

Safety well thought through

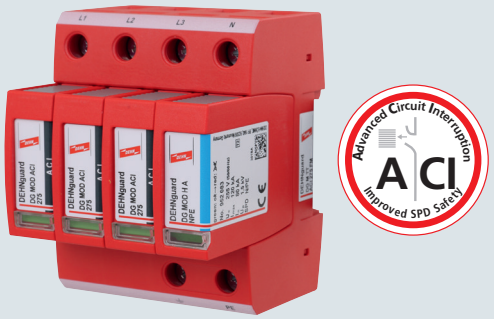
The ACI switch/spark gap combination perfectly unites the functions of a switching unit and the RAC[2] spark gap technology by DEHN to enable the safe operation of a surge protective device. In the case of DEHNguard ACI, it is connected in series with a varistor and united in a protective device.

At the end of the service life of the ACI surge arrester, any fault current is interrupted by the varistor through the switch/spark gap combination connected in series and reduced to such an extent that not even the smallest fuses in the system are tripped. This means much greater availability and operational safety for the system in comparison with standard type 2 arresters with external fuses.

With DEHNguard ACI:

- **You reduce complexity**
- **You improve system availability**
- **You save time, space and material costs**

Type	DG M ... ACI
Nominal voltage AC (U_N)	230/400 V
Maximum voltage (U_C)	275 V
Nominal discharge current (I_N)	20 kA
Short circuit withstand current AC (I_{SCCR})	25 kA
Additional external backup fuse	–
Voltage protection level (U_P)	< 1.5 kV
TOV withstand min.	440 V
Configurations	3+1, 4+0, 3+0, 2+0, 1+1
Temperature range	- 40 ... + 80° C



Find out more at:

▸ ▸ ▸ short link: de.hn/acie

[1] All live conductors should be wired so that they are inherently short-circuit and earth fault proof.
[2] RAC: Rapid Arc Control – spark gap technology to limit the mains follow current

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