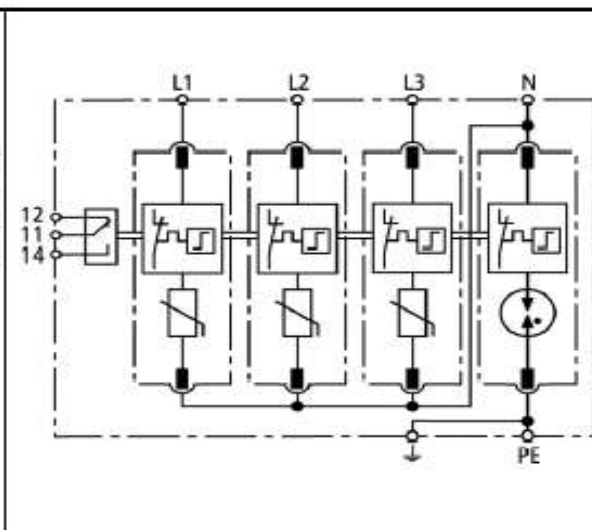


Dimension drawing DG M TT ... FM



Basic circuit diagram DG M TT ... FM



DG M TT ... (FM): Modular surge arrester for TT and TN-S systems ("3+1" circuit)

- Complete prewired unit for TT systems, consisting of a base part and plug-in protection modules
- Energy-coordinated within the Red/Line product family
- High discharge capacity due to powerful zinc oxide varistors/spark gaps
- Reliable SPD control due to "Thermo Dynamic Control"
- Operating state/fault indication of every protective circuit
- Multifunctional terminals for connection of conductors and busbars
- Easy exchange of protection modules without tools by module locking system with releasing button
- Tested for vibration- and shock-proofness acc. to EN 60068-2

DG M TT 275 FM	
SPD according to EN 61643-11	Type 2
SPD according to IEC 61643-1	Class II
Nominal ac voltage [U <sub>N</sub> ]	230/400 V
Max. continuous ac voltage [L-N] [U <sub>C</sub> ]	275 V
Max. continuous ac voltage [N-PE] [U <sub>C</sub> ]	255 V
Nominal discharge current (8/20 μs) [I <sub>n</sub> ]	20 kA
Max. discharge current (8/20 μs) [I <sub>max</sub> ]	40 kA
Lightning impulse current (10/350 μs) [N-PE] [I <sub>imp</sub> ]	12 kA
Voltage protection level [L-N] [U <sub>p</sub> ]	≤ 1.25 kV
Voltage protection level [L-N] at 5 kA [U <sub>p</sub> ]	≤ 1 kV
Voltage protection level [N-PE] [U <sub>p</sub> ]	≤ 1.5 kV
Follow current extinguishing capability [N-PE] [I <sub>ff</sub> ]	100 A <sub>rms</sub>
Response time [L-N] [t <sub>A</sub> ]	≤ 25 ns
Response time [N-PE] [t <sub>A</sub> ]	≤ 100 ns
Max. mains-side overcurrent protection	125 A gL/gG
Short circuit withstand capability at max. mains-side overcurrent protection	50 kA <sub>rms</sub>
TOV voltage [L-N] [U <sub>T</sub> ]	335 V / 5 sec.
TOV voltage [N-PE] [U <sub>T</sub> ]	1200 V / 200 ms
Operating temperature range [T <sub>U</sub> ]	-40°C...+80°C
Cross-sectional area (min.)	1.5 mm <sup>2</sup> solid/flexible
Cross-sectional area (max.)	35 mm <sup>2</sup> stranded/25 mm <sup>2</sup> flexible
Mounting on	35 mm DIN rail acc. to EN 60715

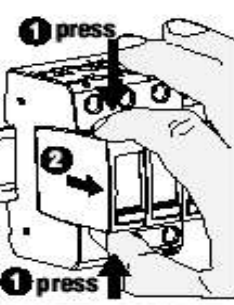
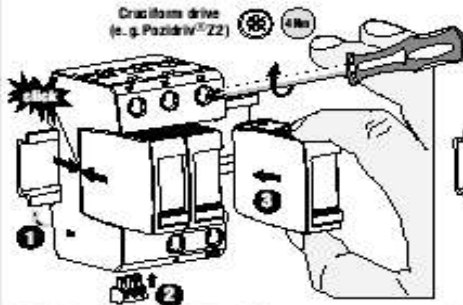


# INSTALLATION INSTRUCTIONS

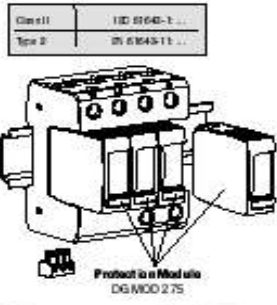
Publication No. 1550 UPDATE 11.06 Id. No. 050464



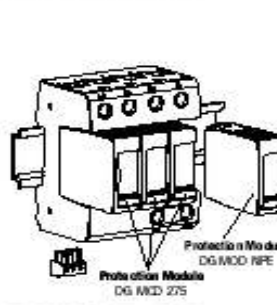
## DEHNguard<sup>®</sup> modular DG M TNC 275 (FM)



## DG M TNS 275 (FM)



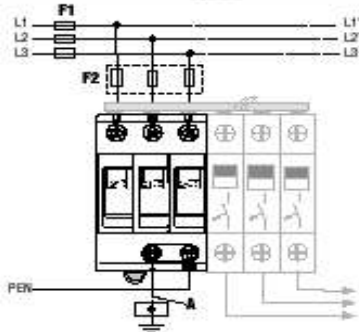
## DG M TT 275 (FM)



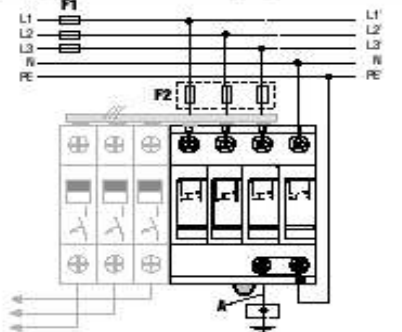
## Technical data / Technische Daten

Typ	DG M TNC 275 (FM)	DG M TNS 275 (FM)	DG M TT 275 (FM)								
	Protection Module DG MOD 275		Protection Module DG MOD NPE								
U <sub>n</sub>	230 / 400 V		250 V								
U <sub>c</sub>	275 V / 350 V		100 A <sub>max</sub>								
I <sub>n</sub>	---		---								
max. I	125 A gL/gG		---								
0° C	-40° C ... +80° C		---								
IP Code	20										
<table border="1"> <tr> <td>min. □ L, N/PE(N) ↓</td> <td>0 mm</td> <td>15 mm</td> <td>6 mm</td> </tr> <tr> <td>max. □ L, N/PE(N) ↓</td> <td>25 mm<sup>2</sup></td> <td>35 mm<sup>2</sup></td> <td>16 mm<sup>2</sup> Cu</td> </tr> </table>				min. □ L, N/PE(N) ↓	0 mm	15 mm	6 mm	max. □ L, N/PE(N) ↓	25 mm <sup>2</sup>	35 mm <sup>2</sup>	16 mm <sup>2</sup> Cu
min. □ L, N/PE(N) ↓	0 mm	15 mm	6 mm								
max. □ L, N/PE(N) ↓	25 mm <sup>2</sup>	35 mm <sup>2</sup>	16 mm <sup>2</sup> Cu								

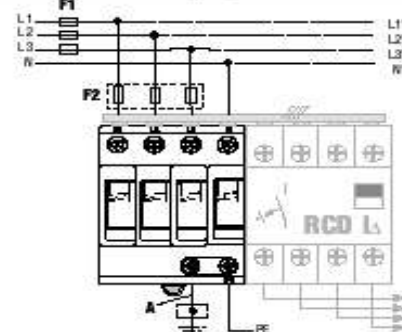
## TN-C DG M TNC 275 (FM)



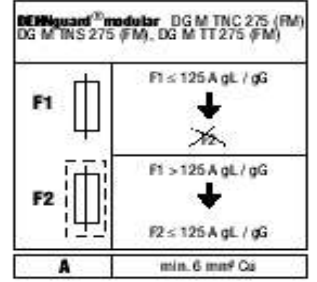
## TN (-C)-S DG M TNS 275 (FM)



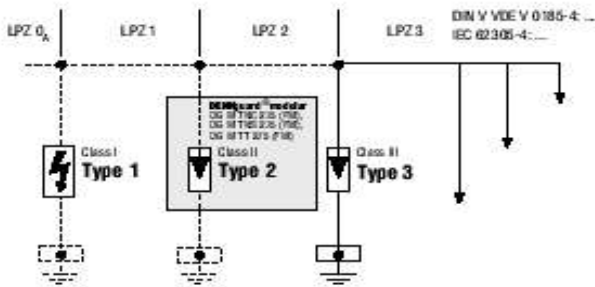
## Fig. a TT DG M TT 275 (FM)



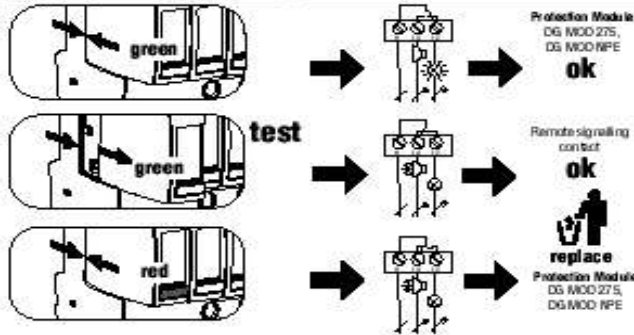
## Backup fuse / Versicherung



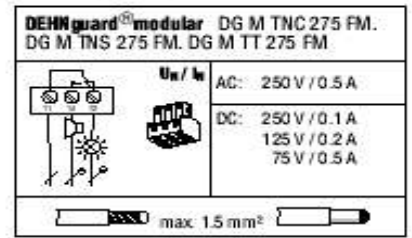
## Coordination / Koordination



## Fault indication / Defektanzeige



## Remote signalling contact / Fernmeldekontakt



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