

PIIIM-275/3+1 Vseries

- Surge arresters type T2 ensure the equipotential bonding and reduce switching, induced and residual overvoltage in LV power supply systems.
- The products consist of varistors with big discharge ability.
- Configurations 1+1 and 3+1 are additionally combined with a gas discharge tube which ensures zero leakage current through the PE conductor.
- Installed on the interface of LPZ 1 – LPZ 2 into subsidiary switchboards and control boxes.
- **M** indication specifies a type of construction with removable module.
- **DS** indication specifies a version with remote monitoring.
- Other voltage levels can be produced on request.

| Type | PIIIM-275/3+1 Vseries | |
|---|--------------------------|---|
| Test class according to EN 61643-11:2012 (IEC 61643-11:2011) | T2 | |
| System | TN-S, TT | |
| Number of poles | 4 | |
| Rated operating AC voltage | U_N | 230 V |
| Maximum continuous operating voltage AC | U_C | 275 V |
| Maximum discharge current (8/20) | I_{max} | 50 kA |
| Nominal discharge current for class II test (8/20) | I_n | 20 kA |
| Total discharge current (8/20) L1+L2+L3+N->PE | I_{Total} | 50 kA |
| Voltage protection level at I_n | U_p | < 1.3 kV |
| Impulse discharge current for class I test (10/350) N/PE | I_{imp} | 20 kA |
| Temporary overvoltage test (TOV) for $t_T = 5$ s (L/N) | U_T | 335 V |
| Temporary overvoltage test (TOV) for $t_T = 0.2$ s (N/PE) | U_T | 1 200 V |
| Response time (L/N) | t_A | < 25 ns |
| Response time (N/PE) | t_A | < 100 ns |
| Maximal back-up fuse | 160 A gL/gG | |
| Short-circuit current rating at maximum back-up fuse | I_{SCCR} | 60 kA _{rms} |
| Lightning protection zone | LPZ 1-2, LPZ 2-3 | |
| Housing material | Polyamid PA6, UL94 V-0 | |
| Degree of protection | IP20 | |
| Operating temperature | θ | -40 ÷ 70 °C |
| Minimum cross-section of connected Cu conductors accord. to HD 60364-5-53:2022 (doesn't apply to „V“ connection) for T2 | S | 2.5 mm ² (L, N) 6 mm ² (PE, PEN) |
| Clamp fastening range (solid conductor) | 2.5 ÷ 35 mm ² | |
| Clamp fastening range (stranded conductor) | 2.5 ÷ 25 mm ² | |
| Tightening moment | 4 Nm | |
| Installation | On DIN rail 35 mm | |
| Modular width | 4 TE | |
| Operating position | Any | |
| Signalling at the device | Optic | |

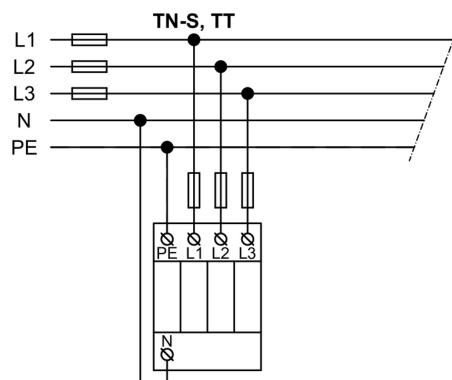
| Type | | PIIIM-275/3+1 Vseries |
|--|---|---|
| Importance of local signaling | | OK – green target FAULT – red target |
| Remote signalling | | No |
| Modular design | | Yes |
| Article number of spare module | | 27 044, 27 049 |
| Lifetime | | > 100 000 h |
| Designed according to standards | | |
| Requirements and test methods for SPDs connected to low-voltage power systems | | IEC 61643-11:2011 |
| Safety of Flammability of Plastic Materials | | UL 94 |
| Application standards | | |
| Protection against lightning | | IEC 62305:2010 |
| Selection and erection of electrical equipment – Switchgear and controlgear | | HD 60364-5-53:2022 |
| Selection and application principles for SPDs connected to low-voltage power systems | | CLC/TS 61643-12:2009 |
| Ordering, packaging and additional data | | |
| Mass | m | 466 g |
| Mass (including the packaging) | m | 490 g |
| Packaging dimensions (H x W x D) | | 77 x 114 x 88 mm |
| Packaging value | V | 0.77 dm ³ |
| ETIM group | | EG000021 |
| ETIM class | | EC000941 |
| Customs tariff no. | | 85363010 |
| EAN code | | 8590681270226 |
| Art. number | | 27 022 |



The link in the QR code leads to the online presentation of the **PIIIM-275/3+1 Vseries**. There, in addition to the always up-to-date data sheet, you will also find all diagrams and drawings, declarations of conformity, or 2D or 3D models and other necessary materials. For more information, visit www.hakil.com



Application wiring diagram (installation)



Internal diagram

