

Phase GDT based Technology

Lightning and Overvoltage Protection with Integrated Fuse

Raycap's technology with back up fuse combines the protection of a separate fuse into one unit, saving space in the control cabinet. On networks with high prospective short circuit currents, SPDs with integrated fuses provide enhanced safety and fault-current protection due to the coordinated tripping characteristics of the thermal disconnect and the integrated fuse.

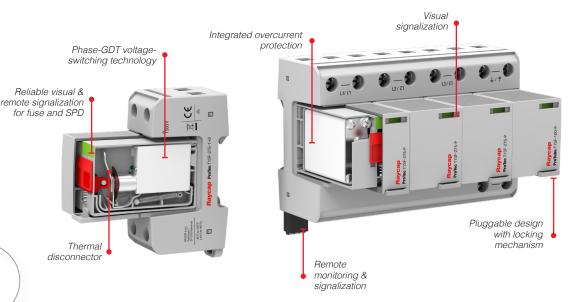
Main features:

- Reduced installation space requirements, installation costs, wiring time and complexity
- Shorter connecting cables improve voltage protection level across installation points
- Enables installation on networks with low prospective short circuit currents
- Visual and remote signalization of fuse and SPD status

ProTec T1SF Series



Raycap's new ProTec T1SF Series is based on Phase Gas Discharge Tube (PGDT) technology, and a new integrated fuse technology. The products ensure safe thermal and fault-current disconnection on networks with prospective short circuit currents as low as 300 A and as high as 75,000 A. A coordinated thermal disconnector provides disconnection at low fault currents (<300 A), extending a continuous fault-tripping characteristic down to 1 A.







The practical 2-in-1 device simplifies planning, installation, and maintenance. For example, the need to dimension a backup fuse is not applicable with the ProTec T2F product series as this is already integrated and matched to its performance parameters.

The Type 2 arrester has an integrated back-up fuse, a protection level of 1,500 V, a maximum discharge capacity of 40 kA 8/20 µs and a rated discharge current of 20 kA 8/20 µs. In addition to the proven Raycap ProTec T2 technology developed for use in systems with a rated current of up to 315 A without backup fuse, the T2F Series with integrated backup fuse offers protection independent of installed fuses found in equipment inside large industrial installations.



Product Selector

| | Combinations | | Network Systems | Product Name | Order Code |
|----------|------------------|-----------|-------------------|-----------------------|------------|
| TYPE 1+2 | | | TN-S, TN-C TT* | ProTec T1SF-275-1+0 | 59.A500 |
| | Single pole | | | ProTec T1SF-275-1+0-R | 59.A501 |
| | 2 pole | | TN-S | ProTec T1SF-275-2+0 | 59.C245 |
| | | | | ProTec T1SF-275-2+0-R | 59.C246 |
| | 2 mala | | TN-C | ProTec T1SF-275-3+0 | 59.C170 |
| | 3 pole | | | ProTec T1SF-275-3+0-R | 59.C171 |
| | 4 pole | | TN-S | ProTec T1SF-275-4+0 | 59.C247 |
| | | | | ProTec T1SF-275-4+0-R | 59.C248 |
| | 2 pole | | TT & TN-S | ProTec T1SF-275-1+1 | 59.C672 |
| | | | | ProTec T1SF-275-1+1-R | 59.C673 |
| | 4 pole | | TT & TN-S | ProTec T1SF-275-3+1 | 59.C172 |
| | | | | ProTec T1SF-275-3+1-R | 59.C173 |
| TYPE 2+3 | Single pole | | TN-S, TN-C TT* | ProTec T2F-300-1+0 | 59.A250 |
| | | | | ProTec T2F-300-1+0-R | 59.A251 |
| | 2 pole | | TN-S | ProTec T2F-300-2+0 | 59.A252 |
| | | | | ProTec T2F-300-2+0-R | 59.A253 |
| | 3 pole | | TN-C | ProTec T2F-300-3+0 | 59.A254 |
| | 3 pole | 21 A 21 A | | ProTec T2F-300-3+0-R | 59.A255 |
| | 4 pole | | TN-S | ProTec T2F-300-4+0 | 59.A256 |
| | 4 pole | | | ProTec T2F-300-4+0-R | 59.A257 |
| | 2 pole | | TT & TN-S | ProTec T2F-300-1+1 | 59.A259 |
| | 2 pole | | | ProTec T2F-300-1+1-R | 59.A260 |
| | 4 pole | | TT & TN-S | ProTec T2F-300-3+1 | 59.A261 |
| | | | | ProTec T2F-300-3+1-R | 59.A262 |
| TYPE 2+3 | Single pole | | IT** | ProTec T2F-440-1+0 | 59.A942 |
| | | | | ProTec T2F-440-1+0-R | 59.A943 |
| | 2 pole | | | ProTec T2F-440-2+0 | 59.A944 |
| | | | | ProTec T2F-440-2+0-R | 59.A945 |
| | 3 pole 4 pole | | | ProTec T2F-440-3+0 | 59.A946 |
| | | | | ProTec T2F-440-3+0-R | 59.A947 |
| | | | | ProTec T2F-440-4+0 | 59.A948 |
| | | | | ProTec T2F-440-4+0-R | 59.A949 |

*Only L-N **Only 440 V



