

PRESS RELEASE



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FCL Components Officially Releases ATEX-Approved Relays

Hoofddorp, The Netherlands –January 14, 2025 – FCL Components Europe, B.V. is introducing a new range of ATEX-certified relays that address safety concerns in potentially explosive environments. This range of relays comply with ATEX directives and IEC 60079 standards, to ensure enhanced protection against ignition risks in these hazardous settings.

ATEX and IEC 60079 Compliance

The European Union mandates compliance with ATEX directives IEC 60079-1 and IEC 60079-15 to ensure the safety of electrical equipment used in explosive atmospheres.

This need for compliance has grown more urgent with stricter EU regulations phasing out refrigerants harmful to the ozone layer and global warming. These refrigerants, like R290 (propane), are flammable, increasing the potential for ignition and explosion risks when used with electrical devices.

UL International certifies that the FCL Components relays have been found to comply with the essential safety and health requirements relating to the design and construction of products intended for use in potentially explosive environments given in Annex II to Directive 2014/34/EU of February 2014.

Compliance with the essential safety and health requirements has been assured by compliance with EN/IEC 60079 standards.

Relays as Potential Ignition Sources

During relay operation, arcing between contacts can occur. When combined with flammable gases like R290 in combination with air, arcing could ignite and potentially cause explosions.

To mitigate this risk, relays used in such environments must be explosion-proof. FCL Components ATEX-approved relays have undergone rigorous testing according to the IEC 60079 standards:

- **IEC 60079-1:** Flux-free cover (RTII)
- **IEC 60079-15:** Plastic-sealed cover (RTIII)

Categorizing Explosive Environments

Hazardous areas are classified into three zones based on the degree of risk:

- **Zone 0:** High-risk areas where explosive atmospheres are consistently present.
- **Zone 1:** Moderate-risk areas where explosive atmospheres may occasionally occur (vapors and liquids).
- **Zone 2:** Low-risk areas with minimal explosion likelihood.

FCL Components provides ATEX-approved relays specifically designed for **Zone 2** applications.

Product Range – ATEX approved relays

FCL Components offers relays that are ATEX approved. This means that UL International certifies that these relays have been found to comply with the Essential Health and Safety requirements relating to the design and construction of products intended for use in potentially explosive atmospheres.

The relays are available in:

- Current ratings from 5A to 16A.
- Flux proof and plastic-sealed enclosures.
- Slim and low-profile designs.
- 1 Form A and 1 Form C contact forms.

For further details, contact us or visit <https://www.fcl-components.com/en/products/relays/atex.html>.

ATEX approved relays:

- FTR-F3 (5A, slim type)
- FTR-MY (5A, slim type with high operating temperature range)
- FTR-K1 (16A, low profile)

Product range – a combination of ATEX and glow wire approved relays

Why not combine both? A combination of ATEX-certified relays and glow wire relays is also available. These relays meet the requirements of the ATEX Directive 2014/34/EU for use in hazardous locations and explosion-protected equipment and are in compliance with IEC 60079-0 and IEC 60079-15 standards, as well as the IEC 60695-2-11 safety standard.

FCL Components combined ATEX and glow wire relays:

- FTR-K1 Flux proof 85°C
- FTR-K1 Flux proof 105°C
- FTR-K1 Plastic sealed 105°C



Our range of ATEX-compliant relays ensures safety and reliability in hazardous environments while maintaining exceptional performance.

Product range - Glow wire approved relays

The relay range also includes a selection of glow wire relays designed in compliance with IEC 60695-2-11 safety standards.

The IEC 60695-2-11 standard, outlines a test method applied to end products, simulating thermal stresses caused by electrically heated sources to assess fire hazard risks. This test ensures that, under defined conditions, an end product exposed to such heat sources exhibits either a limited ability to ignite or, if ignition occurs, a restricted capacity to sustain flame propagation.

FCL Components relays utilize high-resistance plastic materials to enhance fire and ignition protection, effectively mitigating risks associated with overcurrent and short-circuit failures.

Glow wire relays:

- FTR-F3,
- JS
- FTR-K1
- FTR-K3

About FCL Components Europe B.V.

FCL Components Europe B.V., markets, sells, and distributes relays, printers, IoT devices, wireless modules and touch panels throughout Europe, Middle East and Africa. The company is headquartered in Hoofddorp, The Netherlands and has representatives and distribution partners throughout its region. For more information, contact us via telephone at +31 23 5560910, by email info@fcl-components.eu or visit our website: <https://www.fcl-components.com/en>.