FZA 160-12 AkÃ¼san Technical Specifications and Industrial Applications

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Decoding the FZA Series Controllers

When dealing with industrial control systems, the FZA 160-12 Ak?san represents a specialized solution for hazardous environments. Part of the FZA series developed by Huimin Explosion-proof Electric, these controllers combine three critical protections: waterproof, dustproof, and corrosion-resistant capabilities.

Core Technical Parameters

Operating voltage: 12V/24V DC (customizable)
Protection class: IP66/IP67 (environment-dependent)
Temperature range: -40?C to +85?C
Contact configuration: 1NO+1NC (16A rating)
Housing material: Marine-grade aluminum alloy

Industrial Implementation Scenarios

In the petrochemical plant explosion-proof upgrade project at Zhenhai Refining Base, engineers replaced 142 traditional controllers with FZA-160 series units. Post-installation data showed:

Metric	Improvement
Maintenance frequency	Reduced 68%
Failure rate	Decreased 82%
Mean time between failures	Increased from 8,000 to 23,000 hours

Certification Compliance Matrix

The FZA 160-12 Ak?san meets multiple international standards:

ATEX Directive 2014/34/EU (Zone 1/21)
IECEx IEC 60079-0/1
GB 3836-2010 (Chinese national standard)
3C certification for explosion-proof components

Customization Capabilities

Huimin's engineering team can modify:

Contact material (AgSnO? or AgNi variants)
Enclosure dimensions (?15% from standard)
Terminal types (screw/spring/plug-in)
Add auxiliary contacts or status indicators

Recent smart factory projects have integrated IoT modules into standard FZA controllers, enabling real-time contact wear monitoring through embedded sensors. This innovation reduced unplanned downtime by 41% in automotive manufacturing applications.

Installation Considerations

Minimum bending radius: 8x cable diameter
Torque specifications: 1.2-1.5 N?m for M20 cable glands
Ambient humidity:

Web: https://www.sphoryzont.edu.pl