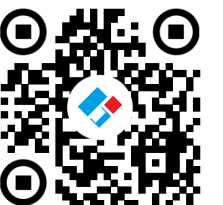


AFR SERIES ARC FLASH RELAY

Mitigate ARC flash hazards in MV and LV systems, safeguarding personnel and equipment.



CHONG QING
BLUE JAY TECHNOLOGY
CO.,LTD



AFR SERIES

Millisecond-level arc fault detection cuts arc energy drastically, protecting field operators and switchgear assets. Fast selective tripping limits equipment burnout, reduces overhaul costs and long production outages across LV/MV power systems.

FAST RESPONSE & HIGH RELIABILITY

- Trip time: ≤ 10 ms (Arc only), ≤ 20 ms (Arc + current)
- Dual confirmation logic improves stability
- Complies with IEC 60255 standards

DUAL-SPECTRUM ARC DETECTION TECHNOLOGY

- Visible light + UV (280–400nm) dual detection
- UV filtering reduces ambient light interference
- Stable detection in harsh industrial environments



INTELLIGENT PROTECTION & TRIP LOGIC

- Pure Arc / Arc + current verification
- Zone selective protection
- Master trip / local trip coordination
- Fully programmable tripping logic



SMART SYSTEM INTEGRATION & DIAGNOSTICS

- RS485 Modbus RTU / optional ethernet
- SOE event recording up to 1024 lists
- Sensor line self-check & diagnostics
- Supports up to 48 optical probes

SCALABLE MULTI-CHANNEL ARCHITECTURE

- Supports 3 / 4 / 12–48 channel configurations
- Suitable for LV & MV switchgear bays
- Expandable multi-compartment protection



Fast Detection
Millisecond-level arc fault detection



Selective Tripping
Minimize damage and reduce downtime



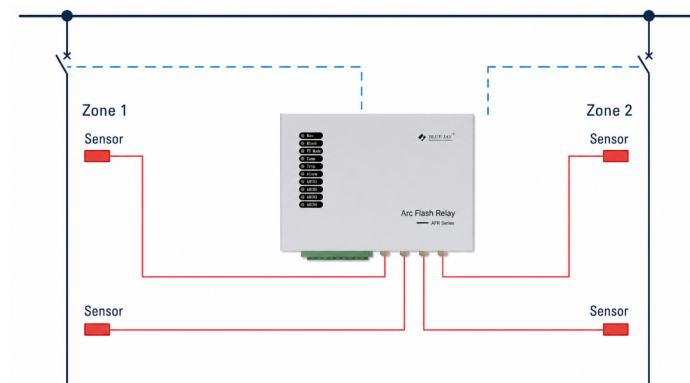
Personnel Protection
Protect people, equipment and operations



Asset Protection
Reduce equipment burnout and maintenance costs

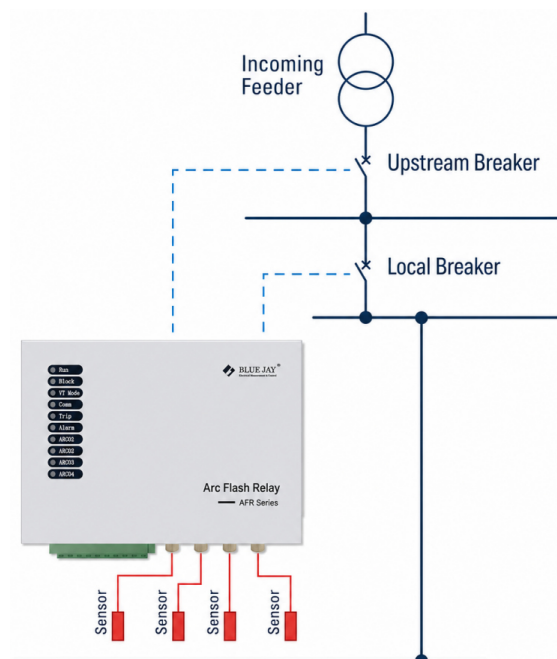
ZONE-BASED PROTECTION

With multiple protection zones individually configurable. Optical fiber and current sensors can be freely assigned to each zone, enabling precise fault localization and rapid, targeted isolation.



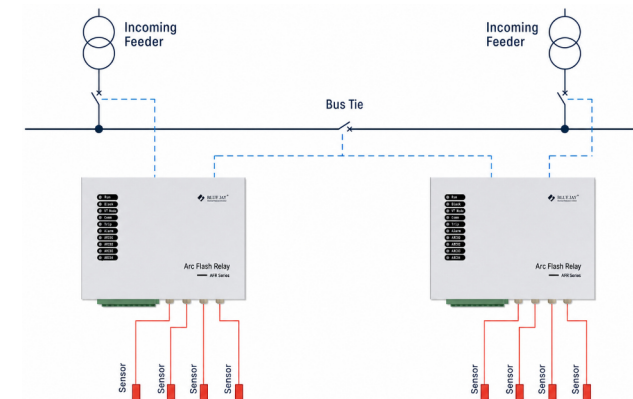
UPSTREAM BACKUP TRIPPING

Provides an additional protection layer by sending a trip signal to the upstream breaker when the local breaker fails to clear an arc fault. This rapidly disconnects the power source, limits arc energy, and improves protection for switchgear and personnel.



TIE BREAKER COORDINATION

Enables coordinated tripping between incoming feeders and the bus tie breaker. During arc fault, the system can selectively trip appropriate breaker while keeping unaffected sections energized.



RELATED ACCESSORIES



SCM-OPVP VISIBLE LIGHT DETECTION

- 240° wide-angle detection
- 280–550nm spectrum
- Sensitivity 5–20Klux
- For normal indoor switchgear compartments



SCM-OPUV UV LIGHT DETECTION

- 240° wide-angle detection
- 280–400nm UV spectrum
- 1–10mW/cm² sensitivity
- For outdoor / open switchgear compartments



CURRENT TRANSFORMER

- 0.06–6In measurement range
- 5A input / 2.5mA output, accuracy $\pm 2.5\%$
- For light & current dual detection