ARB series

Arc Flash Protection Relay

Technical Features

ARB6

Enables selective tripping and coordination.

Adaptable to complex operating conditions.

ARB4

Suitable for cable chambers, capacito compensation cabinets, etc.

ARB-S0

No power supply required, maintenance-free;

No electrical safety hazards.

Solution

Solution 1:Busbar Arc Protection

Configuration: One ARB6 device is configured for each busbar section. One ARB-S sensor is installed in the busbar compartment and handcart compartment of each switchgear cabinet.

Protection Logic: Arc flash in the busbar compartment or handcart compartment + overcurrent from the corresponding busbar's incoming feeder/bus-tie serves as dual criteria. Triggers tripping of circuit breakers in the incoming feeder cabinet and bus-tie cabinet of the affected busbar section.

Solution 2:Cable Room Arc Protection

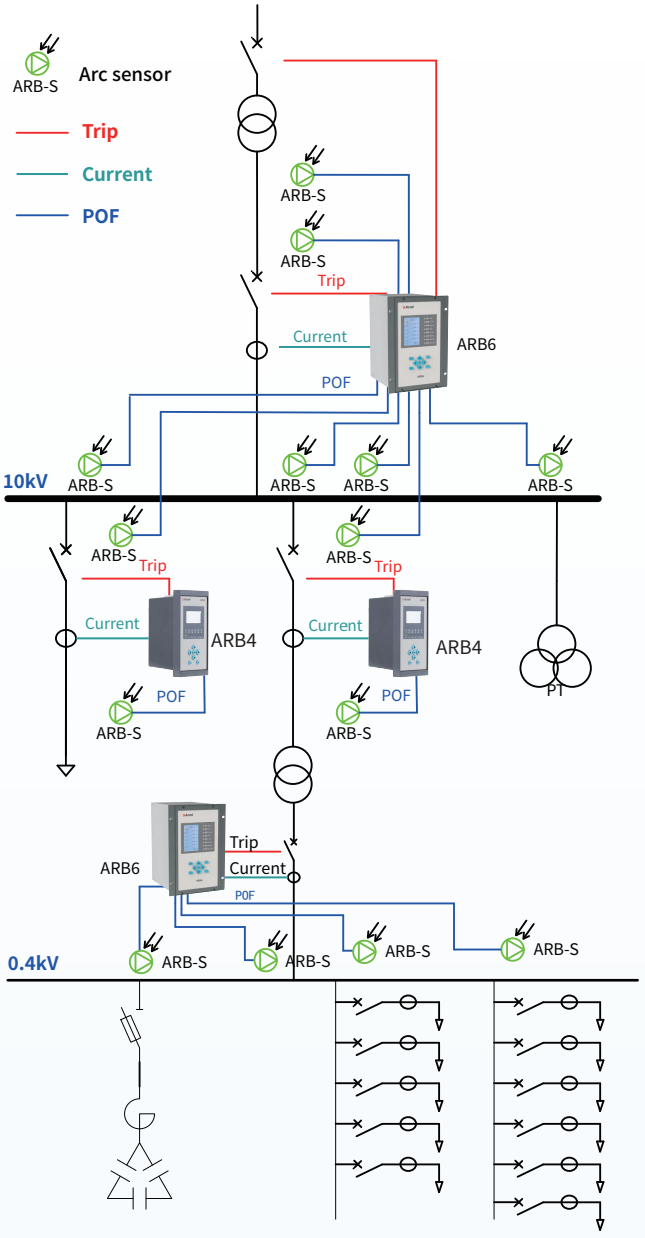
Configuration: One ARB4 device is configured for each feeder cabinet. One ARB-S sensor is installed in the cable compartment of the feeder cabinet.

Protection Logic: Arc light detected in the cable compartment + overcurrent from the corresponding feeder cabinet serves as dual criteria. Triggers tripping of the circuit breaker in the associated feeder cabinet.

Solution 3: Combined Busbar and Cable Compartment Arc Protection

Configuration: Integrate the configurations of **Solution 1** and **Solution 2.**

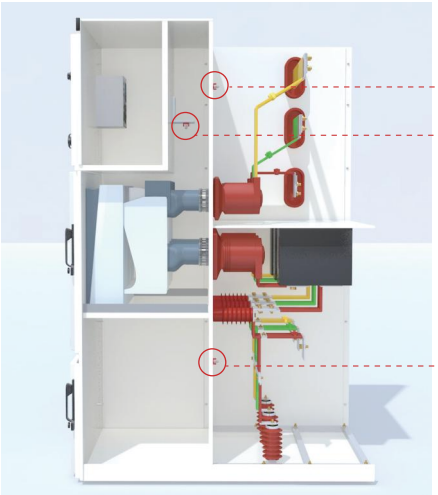
Protection Logic: Combine the protection logic of Solution 1 and 2 to provide comprehensive arc flash protection for both busbar and cable compartments.

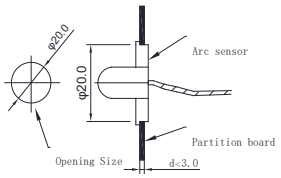


Function	Model	ARB6					ARB4		
		ARB6-A6	ARB6-A12	ARB6-A18	ARB6-A24	ARB6-A30	ARB4-A1	ARB4-A2	ARB4-A3
Hardware	Arc sensor signal acquisition	6	12	18	24	30	1	2	3
	Current signal acquisition	4 sets of 3-phase current inputs, total 12 current channels					1 sets of 3-phase current input, total 4 current channels		
	Voltage signal acquisition	3 zero-sequence voltage inputs, total 3 voltage channels							
	Digital Input	5	22	5	22	5	8		
	Digital Output	14 normally open relay outputs (including 4 high-speed outputs) and 2 normally closed relay outputs					5 normally open relay outputs		
	RS485 interface	2					1		
	IRIG-B timing interface	1					○		
	Ethernet interface	3					0		
	USB interface	1					0		
Function	Arc protection: Arc single criterion								
	Arc protection: Arc and Current dual criterion	■							
	Arc protection: Arc and zero-sequence voltage dual criterion	■							
	Arc monitoring and fault location	■							
	Real-time self-inspection of devices, sensors, and optical fibers	■							
	Failure protection	■							
	CT disconnection monitoring	■							
	Non-electricity protection	■							
	Maintenance mode interlock	■							
	Fault waveform recording	■							
Protocol	Modbus	■							
	IEC101	■							
	IEC103	■							
	IRIG-B	■							

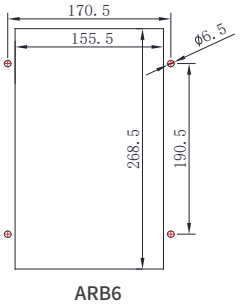
Note: ■ means with this function, ○ means optional function,—means without this function.
RS485 communication interface and IRIG-B interface of ARB4 are multiplexed, only one can be selected.

Installation and Dimensions

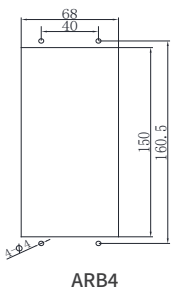




ARB-S0



ARB6



ARB4

CERTIFICATE