



ARC DETECTOR SWITCH SS

Protection Program

PZ-04081E

Application

Arc detector switch is used in arc protection system in switchgears with double busbars.

Arc detector switch ensures selective arc protection for each section (busbar) in cases when arc occurs in circuit breaker section of switchgear. When an arc occurs only the busbar feeding the faulty switchgear panel is disconnected.

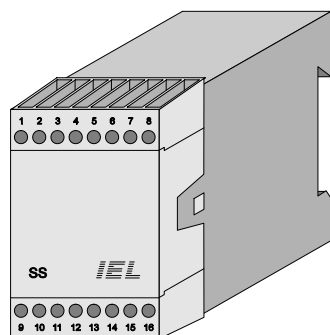


figure 1. Arc detector switch

Functional description

Arc detector switch connects one or two optical arc detectors placed in circuit breaker compartment or disconnector of the switchgear to arc monitor ZELK-3 used for associated busbar protection. Supply voltage 48, 110 or 220VDC is connected to terminals 1-2 (9-10) of arc detector switch via auxiliary contact of switchgear disconnector. Switching the disconnector ON will via galvanic insulation circuitry connect optical detectors to

Main features

- switching of two pairs of optical arc detectors on to the arc monitors ZELK-3
- auxiliary supply not required
- galvanical insulation 2,5kV between all insulated circuits
- small dimensions and simple mounting on rail
DIN EN 50022-35

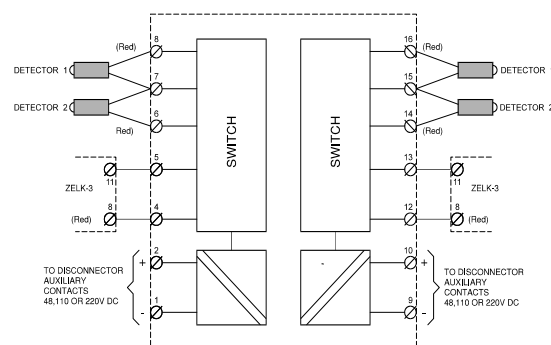


figure 2. Terminal diagram for arc detector switch SS

switch output 4-5 (12-13). By switching the disconnector OFF optical detectors are disconnected from output 4-5 (12-13). One arc detector switch SS is located in each switchgear panel and provides switching of two pairs of optical detectors on to two arc monitors ZELK-3. In this way arc monitor ZELK-3 acquires only optical detectors associated to disconnectors and circuit breakers connected to protected busbar.

Specifications

Optical inputs:

Number of optical detectors 2 + 2

Optical outputs:

supply:..... 12V DC

current:..... 20 mA

Control inputs:

supply:..... 48, 110V or 220VDC

current:..... 14 / 7 mA

general data:

temperature range-10°C...+55°C

insulation test voltage2,5kV, 50Hz, 1min
between all insulated
circuits**mechanical data:**

mounting.....on rail,

DIN EN 50022-35

dimensions.....45x74x120 mm

