AQ-101LV Arc flash protection

AQ-101LV is a sophisticated microprocessor-based arc flash protection unit for arc light detection. The AQ-101LV acts as a sub unit to AQ-110P in an AQ-100 arc protection system. It can also function as a stand-alone in light-only systems. It is designed to minimize the damage caused by an arcing fault (arc flash) by tripping the circuit breaker sourcing the fault current. The AQ-101LV complete system self-supervision function provides the highest level of dependability by continuously monitoring all internal system functions along with external connections.

Technical Data

PROTECTION

I/O

Applicable sensors

<table>
<thead>
<tr>
<th>Sensor Type</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>AQ-01 light sensor</td>
<td>(activation at 8/25/50 klx)</td>
</tr>
<tr>
<td>AQ-02 light and pressure sensor</td>
<td></td>
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<tr>
<td>AQ-06 plastic fiber sensor</td>
<td>(5-50 m length) (option)</td>
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<tr>
<td>AQ-07 glass fiber sensor</td>
<td>(5-60 m length) (option)</td>
</tr>
</tbody>
</table>

Trip Relays T1, T2, T3, T4

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number: 3 NO + 1 NC or 4 NO</td>
<td></td>
</tr>
</tbody>
</table>

Rated voltage: 250 Vac/dc
Continuous carry: 5 A
Make and carry for 0.5 s: 30 A
Make and carry for 3 s: 16 A
Breaking capacity DC, when time constant L/R = 40 ms: 40 W; 0.36 A at 110 Vdc
Contact material: AgNi 90/10

Binary Output
Rated voltage: +24 Vdc
Rated current: 20 mA (max)
Number of outputs: 1

Binary Inputs BI1, BI2
Threshold voltage: 24 Vdc
Rated voltage: 250 Vac/dc
Rated current: 3 mA
Number of inputs: 2

Power supply
Us: 80...265 Vac/dc (option 18...72 Vdc)
Maximum interruption: 100 ms
Maximum power consumption: 5 W
Standby current: 90 mA

HMI
12 Indication LED's
Multifunction push button
Autoconfiguration
Indication reset
System check

SELF-SUPERVISION
Sensors and wiring
Binary I/O
### Trip coil
- Power supply
- Internal voltages
- Settings

### SYSTEM CONNECTIVITY
- AQ-200 series
- AQ-300 series
- AQ-100 series
- Link to AQ SAS manual