Voltage presence/absence relay

The Flair 23DV incorporates the voltage presence/absence relay function, the characteristics of which are described in the technical data sheet for the VD23 product.

Technical data sheet

Flair 21D – 22D – 23DV
Self-powered, adjustment-free fault passage indicators

• At the cutting edge of technology, they are used on underground LV networks with isolated neutral or directly earthed networks and on all networks for detection of overcurrents.

• Self-powered, they ensure permanent operation of the fault current passage detection and indication system.

• Adjustment-free, they are immediately operational - there are no manual settings or adjustments possible.

• Compact and in DIN format, they fit naturally into the 48V cubicles.

• Specially designed, they offer an ammeter/digital maximeter function.

• Comprehensive, the Flair 23DV version incorporates a highly exploited voltage presence/absence relay function.

Easergy Flair 21D – 22D – 23DV is a family of fault passage indicators in DIN format, small in size, efficient and self-powered, which adapt automatically to the network.

Selection table

<table>
<thead>
<tr>
<th>Characteristics per product</th>
<th>Flair 21D</th>
<th>Flair 22D</th>
<th>Flair 23DV</th>
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</thead>
<tbody>
<tr>
<td>Voltage presence/absence relay option</td>
<td>✔</td>
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<tr>
<td>Interface with VPIS-VO needed for voltage presence/absence relay option</td>
<td>✔</td>
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<tr>
<td>Interface with VPIS-VO possible to confirm the fault by voltage presence/absence relay option</td>
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<tr>
<td>External indicator lamp output powered by Flair (‘BVE’)</td>
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<tr>
<td>External indicator lamp output powered by battery (‘BVP’)</td>
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<tr>
<td>Manual setting for earth fault only</td>
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<td>Voltage sensors Selection guide in the VD23 technical data sheet</td>
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<td>Accessory MF1-MFH-CT connection cable</td>
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<td>Accessory Standard BVE 59988</td>
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<td>Accessory Zero sequence for cables (split) MFH2200 (CT2) 59927</td>
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<td>Accessory Zero sequence for cables (split) CTRH2200 (CT1) 59926</td>
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<td>Accessory MF1-MFH 59962</td>
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<td>Enclosure characteristics</td>
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<td>Adequate enclosure DIN 66021 requirements</td>
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<td>Voltage presence/absence relay function</td>
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<td>Connection to terminals:</td>
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<td>Mounting in any type of MV cubicle: RM6, SM6, other.</td>
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<td>Current sensors</td>
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</table>
Fault detection

Overcurrent detection
- Analyzes the three phases, adjusting the saturation of the detection thresholds (type B setting) to the phase current or from special meter settings:
  - Flair 21D: 4 detection thresholds from 5 to 30 A in 5 A increments, adjustable via microswitches;
  - Flair 22D and Flair 23DV: 4 detection thresholds from 40 A to 1000 A in 5 A increments, adjustable via the front panel keypad;
  - Flair 22D and Flair 23DV: configuration via the front panel keypad;
  - Flair 22D and Flair 23DV: configuration via the front panel keypad;

- Overcurrent settings from 40 A to 1000 A in 5 A increments;
- Flair 21D: 4 detection thresholds from 40 A to 1000 A, adjustable via microswitch;
- Flair 22D and Flair 23DV: 4 detection thresholds from 40 A to 1000 A, adjustable via microswitch.

- A fault is confirmed following 3 of the settings reaching the set values.
- Fault indication:
  - A fault is confirmed following 3 of the settings reaching the set values.
  - A fault is confirmed following 3 of the settings reaching the set values.
  - A fault is confirmed following 3 of the settings reaching the set values.

- Fault indication, including the phase indicated.
- Fault indication, including the phase indicated.
- Fault indication, including the phase indicated.

- Clear, comprehensive display
  - The fault current is displayed permanently on the meter display.
  - The meter display is refreshed, the phase fault indication is updated.
  - The display refreshing interval is adjustable from 1 to 3 seconds (0.5 second increments).
  - Time delay for resetting is adjustable from 1 to 3 seconds (0.5 second increments).

- Time delay for resetting is adjustable from 1 to 21 seconds (2 s increments).
- Time delay for resetting is adjustable from 1 to 3 seconds (0.5 second increments).
- Time delay for resetting is adjustable from 1 to 3 seconds (0.5 second increments).

- The fault duration is displayed on the meter display.
- The fault duration is displayed on the meter display.
- The fault duration is displayed on the meter display.

- Clear, comprehensive display
  - The fault current is displayed permanently on the meter display.
  - The meter display is refreshed, the phase fault indication is updated.
  - The display refreshing interval is adjustable from 1 to 3 seconds (0.5 second increments).

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