The QF17 is a 6 kA earth leakage device, available as a circuit breaker as well as switch. It is black in colour and can be mounted on DIN Rail and the CBI Mini Rail. Its front escutcheon is 57 mm.

**Features**
- Hydraulic-magnetic technology
- 100% rating capability, independent of ambient temperature
- VC 8035 compliant
- VDE and CCC approved, CE certified
- UL recognised (UL 1053, UL 1077)
- Ratings 5 to 63 A
- Earth leakage sensitivity 30 mA
- Single pole plus switched neutral earth leakage protection
- Switch versions fitted with short circuit protection
- Available in various currents and time delays
- Precision tripping characteristics
- Compact 26 mm wide module
- Trip indication with mid-trip position
- Reset immediately after overload
- Suitable to use for electrical isolation
- Shell designed for easier installation onto busbar

**Applications**
- Residential and commercial applications requiring high sensitivity earth leakage protection from electrical shock and fire hazards
- Earth leakage protection (IEC / EN 60947-2)
- Telecom / datacom equipment
- Lighting control
- UPS equipment
- Alternative energy equipment
- Mobile power generation equipment
- Railway signalling equipment
- Industrial equipment

**Auxiliary Switch, Trip Alarm & Combo:**

**Features**
- Auxiliary switch
- Auxiliary switch + trip alarm
- Trip alarm
- AC and DC voltages
- UL 489 listed (auxiliary switch: 6 A 250 V AC, 0.5 A 80 V DC)
- IEC 60947-5-1 approved (auxiliary switch: 6 A 240 V AC, 0.5 A 110 V DC; trip alarm: 6 A 240 V AC, 0.5 A 110 V DC)
- Factory fitted
- Attached to right hand side of circuit breaker
- Compact 6.5 mm width

**Optional Accessories**
- Rear studs (factory fitted)
- Handle lock
- Surface mounting clips
- Busbar
- Escutcheon blank
- Safety blank

**Approvals**
- VC 8035
- (IEC / EN 60947-2)
- (UL 1053 / UL 1077)
# Technical Data

<table>
<thead>
<tr>
<th>Product Type</th>
<th>QF17A</th>
<th>QF17C</th>
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</thead>
<tbody>
<tr>
<td>Approvals</td>
<td>VC 8035</td>
<td></td>
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<tr>
<td>Number of Poles</td>
<td>2 (1+N)</td>
<td>2 (1+N)</td>
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<tr>
<td>Standard Ampere Ratings</td>
<td>5 to 63 A</td>
<td>40 and 63 A</td>
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<td>Sensitivity</td>
<td>30 mA</td>
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<tr>
<td>Rated Interrupting / Withstand Capacity</td>
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<tr>
<td>Time Delay Curves</td>
<td>2</td>
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<th>QF17A</th>
<th>QF17C</th>
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<tr>
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<tr>
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<td>40 and 63 A</td>
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<tr>
<td>Sensitivity</td>
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<tr>
<td>Rated Voltage</td>
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<td>240 V</td>
</tr>
<tr>
<td>Rated Interrupting / Withstand Capacity</td>
<td>6 kA</td>
<td>-</td>
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<tr>
<td>Time Delay Curves</td>
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<td>6 kA</td>
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<tr>
<td>Approvals</td>
<td>UL 1053, UL 1077</td>
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<tr>
<td>Number of Poles</td>
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<td>2 (1+N)</td>
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<tr>
<td>Standard Ampere Ratings</td>
<td>5 to 63 A</td>
<td>40 and 63 A</td>
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<tr>
<td>Sensitivity</td>
<td>22 mA</td>
<td>22 mA</td>
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<tr>
<td>Rated Voltage</td>
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<td>240 V</td>
</tr>
<tr>
<td>Rated Interrupting / Withstand Capacity</td>
<td>5 kA</td>
<td>-</td>
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<tr>
<td>Time Delay Curves</td>
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<td>5 kA</td>
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<th>Product Type</th>
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<th>QF17C</th>
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<tr>
<td>Approvals</td>
<td>CCC</td>
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<td>240 V</td>
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<tr>
<td>Rated Interrupting / Withstand Capacity</td>
<td>6 kA</td>
<td>-</td>
</tr>
<tr>
<td>Time Delay Curves</td>
<td>2</td>
<td>6 kA</td>
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</tbody>
</table>

### Auxiliary Module

- **Auxiliary Switch**: DIN and CBI Mini Rail mounted
- **Trip Alarm**: CBI Mini Rail mount only
- **Auxiliary Switch / Trip Alarm Combo**: CBI Mini Rail mount only
**QF17 - Series Earth Leakages**

**Technical Data**

<table>
<thead>
<tr>
<th>Product Type</th>
<th>QF17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Temperature Range</td>
<td>-40 °C to +85 °C</td>
</tr>
<tr>
<td>Mounting Options</td>
<td>Dual mounting (DIN &amp; Mini), surface mount, front mount</td>
</tr>
<tr>
<td>Time Delay Curves</td>
<td>2 (A version only)</td>
</tr>
</tbody>
</table>
| Endurance         | 10000 operations - 1500 electrical at rated current and voltage (IEC 60947-2)  
                      6000 electrical operations (UL 1077) |
| Dielectric Strength | 1480 V (single pole) / 1830 V (multi pole), 50 Hz for one minute after testing |
| Weight             | 264 g - QF17C, 265 g - QF17A (unpacked) |
| Humidity           | 35 to 85% relative |
| Altitude           | Certification tests done at altitude ≈ 2000 metres.  
                      Will operate at higher altitudes. |
| Shock              | 16 G (IEC 600068-2-27) |
| Vibration          | 2 G (IEC 600068-2-27) (sinusoidal wave) |
| Flammability       | I3 - Ignition does not persist at 850 °C after  
                      glow wire is withdrawn with an oxygen index of ≥ 28 |
| Toxicity           | F1 - Smoke index of ≤ 20 which determines the fume class |
| Pollution Degree   | PD2 - Normally only non-conductive pollution occurs.  
                      Temporary conductivity caused by condensation is to be expected. |

<table>
<thead>
<tr>
<th>Earth Leakage</th>
<th>Wire Size mm² (IEC)</th>
<th>Torque (IEC)</th>
<th>Comments</th>
</tr>
</thead>
</table>
| 1+N           | 0.75 - 35 mm²       | 2.5 Nm       | Pozidriv #2  
                      Combi head |
## Ordering Information

**Example Code:** Q-F-17-A--DM-2-63A-30mA-240V---

<table>
<thead>
<tr>
<th>Group</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
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</thead>
<tbody>
<tr>
<td>Requirement</td>
<td>Q Frame</td>
<td>Type F</td>
<td>1 pole + N</td>
<td>Overload</td>
<td>No Auxiliary Switch</td>
<td>Dual Mount</td>
<td>Medium delay curve 2</td>
<td>Current Rating 63 A</td>
<td>Sensitivity 30 mA</td>
<td>Voltage 240 V AC</td>
<td>No special termination</td>
<td>Future use</td>
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<tr>
<td>Long Code</td>
<td>Q</td>
<td>F</td>
<td>17</td>
<td>A</td>
<td>-</td>
<td>DM</td>
<td>2</td>
<td>63A</td>
<td>30mA</td>
<td>240V</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Group 1:** Frame Type
- **Code:** Q
  - **Description:** 26 mm wide earth leakage

**Group 2:** Product Type
- **Code:** F
  - **Description:** 240 V AC, 5 / 6 kA
  - **Comments:** 5 kA (VC 8035) / 6 kA (IEC / EN 60947-2, CCC, UL 1053, UL 1077)

**Group 3:** No of Poles
- **Code:** 17
  - **Description:** Single pole plus switched neutral (1+N)
  - **Comments:** QF17

**Group 4:** E-L Type
- **Code:** A
  - **Description:** Overload (auto tripping)
  - **Comments:** White and green handle
- **Code:** C
  - **Description:** Switch disconnector
  - **Comments:** Green handle

**Group 5:** Auxiliary / Additional Pole
- **Code:** -
  - **Description:** Not applicable
  - **Comments:** Use this code if no auxiliary used
- **Code:** A
  - **Description:** Auxiliary switch (1 x Aux in 1 module)
  - **Comments:** 6.5 mm module fitted on right-hand side
- **Code:** AA
  - **Description:** Double auxiliary switch (2 x Aux switch in 1 module)
  - **Comments:** 6.5 mm module fitted on right-hand side
- **Code:** T
  - **Description:** Trip alarm (1 x trip alarm in 1 module)
  - **Comments:** 6.5 mm module fitted on right-hand side
- **Code:** AT
  - **Description:** Auxiliary switch + trip alarm (in 1 module)
  - **Comments:** 6.5 mm module fitted on right-hand side

**Group 6:** Mounting
- **Code:** DM
  - **Description:** Dual mount
  - **Comments:** Dual mount supplied in black body only - 57 mm escutcheon

**Group 7:** Time Delays
- **Code:** 2
  - **Description:** Medium time delay
  - **Comments:** 5 – 10 White handle

**Group 8:** Current Ratings
- **Code / Description:** 5, 10, 15, 16, 20, 25, 30, 32, 40, 50, 60, 63 A
  - **Comments:** Ratings available vary depending on certification
  - **Other ratings are available as special orders. Check availability.

- **Code / Description:** 40, 63 A
  - **Comments:** QF17C
  - **Other ratings are available as special orders. Check availability.

**Group 9:** Sensitivity
- **Code:** 30mA
  - **Description:** Standard

**Group 10:** Voltage
- **Code:** 240 V
  - **Description:** 240 V AC

**Group 11:** Special Termination
- **Code:** S
  - **Description:** Rear connected stud (factory fitted)
  - **Comments:** Factory fitted

**Group 12:** For future use (-)

* For options not listed, please contact CBI
QF17 - Series Earth Leakages

Time Delay Curves

* The published time delay curves are generated at 30°C ambient temperature with the Circuit Breaker mounted in the up-right position. The “must hold”, “must trip” and “instantaneous trip” current values are not affected by temperature, although delay time for the other operating current values may have to be adjusted using the temperature compensation curve which is available on request.

Internal Impedance vs Current Rating

Q-Range impedance values

* The published time delay curves are generated at 30°C ambient temperature with the Circuit Breaker mounted in the up-right position. The “must hold”, “must trip” and “instantaneous trip” current values are not affected by temperature, although delay time for the other operating current values may have to be adjusted using the temperature compensation curve which is available on request.
QF17 - Series Earth Leakages

Outline Dimensions: Dual Mount

TOLERANCE ±0.4 UNLESS OTHERWISE SPECIFIED
(DIMENSION IN BRACKETS ARE IN INCH)

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