## -Power-Breaker-

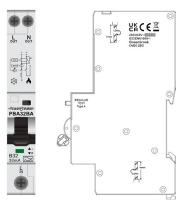
## **AFDD Range with RCBO** (Arc Fault Detection Device)

**B** Curve

The PowerBreaker range of circuit protection devices are designed and tested for use with PowerBreaker Consumer Units. Type A

- Provides protection against AC earth fault currents and pulsating DC currents, whether suddenly applied or slowly increasing.
- **Rated Short Circuit Capacity 6kA**
- 1 Pole RCBO + Switch Neutral
- **Operational Characteristics Type A. 30mA**
- **Instantaneous Tripping B Curve**

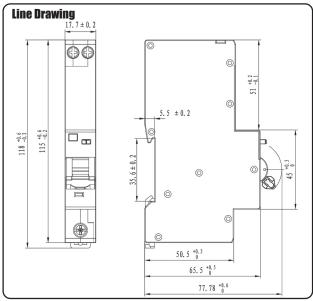
**Type B curve** is used for the protection of circuits with equipment that have Low surge currents.



| Protection Area             |                        |  |  |  |
|-----------------------------|------------------------|--|--|--|
| Fault Type                  | Detected by Integrated |  |  |  |
| Short Circuit               | МСВ                    |  |  |  |
| Overload                    | МСВ                    |  |  |  |
| Residual Current            | RCD                    |  |  |  |
| Series Arcing Fault         | AFD                    |  |  |  |
| Parallel Arcing Fault       | AFD                    |  |  |  |
| Parallel Arcing Fault to PE | RCD                    |  |  |  |
| Over Voltage                | AFD                    |  |  |  |

|                        | PBA06BA           | PBA10BA           | PBA16BA           | PBA20BA           | PBA25BA           | PBA32BA           | PBA40BA           |
|------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Rated Residual Current | 6A                | 10A               | 16A               | 20A               | 25A               | 32A               | 40A               |
| Pack Quantity          | 1                 |                   |                   |                   |                   |                   |                   |
| Barcode                | 5012739<br>654428 | 5012739<br>654435 | 5012739<br>654442 | 5012739<br>654459 | 5012739<br>654466 | 5012739<br>654473 | 5012739<br>654480 |

| AFDD RCBO: Red LED Status Indication                |                              |  |  |
|---|------------------------------|--|--|
| Constant Lit  | Device Operational           |  |  |
| 1 Flash/Sec ▶ 10 Sec                                | Series or Parallel Arc Fault |  |  |
| 2 Flash/Sec ► 10 Sec                                | Over Voltage >275V           |  |  |
| 5 Flash/Sec   | Self-Test Failure            |  |  |
| Not Lit No Supply Voltage                           |                              |  |  |
| Consult Instruction leaflet for further information |                              |  |  |



NOTE: These devices MUST be installed by a qualified electrician in accordance with the latest wiring regulations (BS7671).



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| TECHNICAL INFORMATION                             |                              |  |  |  |
|---|------------------------------|--|--|--|
| Arc Fault Detection                               | Yes                          |  |  |  |
| Number of Poles                                   | 1 Pole + switched Neutral    |  |  |  |
| Rated Voltage (Un)                                | 240VAC                       |  |  |  |
| Rated Residual Current                            | 30mA                         |  |  |  |
| Type of Residual Current                          | Type A                       |  |  |  |
| Rated Non-tripping Current                        | 0.5                          |  |  |  |
| Rated Frequency                                   | 50/60Hz                      |  |  |  |
| Rated Short-Circuit Capacity                      | 6kA                          |  |  |  |
| Tripping Characteristics                          | Туре В                       |  |  |  |
| Energy Limiting Class                             | 3                            |  |  |  |
| Index of Protection                               | IP20                         |  |  |  |
| Terminals   | Pillar type 1 –25mm²         |  |  |  |
| Mechanical Endurance                              | >10,000 times                |  |  |  |
| Electrical Endurance                              | >4,000 times                 |  |  |  |
| Bus Bar Thickness                                 | 0.8 to 2mm                   |  |  |  |
| Ambient Temperature                               | - 25°C to +45°C              |  |  |  |
| Storage Temperature                               | - 35°C to +60°C              |  |  |  |
| <b>Torque</b><br>(Recommended minimum tightening) | 2.5 Nm                       |  |  |  |
| Dielectric strength                               | 2500V                        |  |  |  |
| Din Rail Mounting                                 | Yes                          |  |  |  |
| Guarantee   | 3 Years                      |  |  |  |
| Conforms To                                       | BS EN 61009-1<br>BS EN 62606 |  |  |  |

## -PowerBreaker-

## AFDD Range with RCBO (Arc Fault Detection Device)

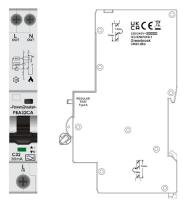
**C** Curve

The PowerBreaker range of circuit protection devices are designed and tested for use with PowerBreaker Consumer Units.

Type A

- Provides protection against AC earth fault currents and pulsating DC currents, whether suddenly applied or slowly increasing.
- Rated Short Circuit Capacity 6kA
- 1 Pole RCBO + Switch Neutral
- Operational Characteristics Type A. 30mA
- Instantaneous Tripping C Curve

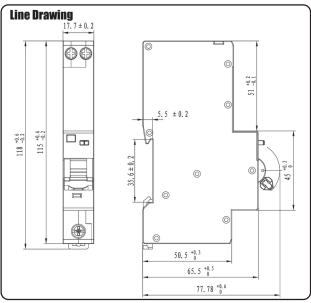
Type C curve is used for the protection of circuits with equipment that have High surge currents.



| Protection Area                 |     |  |  |  |
|---------------------------------|-----|--|--|--|
| Fault Type Detected by Integrat |     |  |  |  |
| Short Circuit                   | МСВ |  |  |  |
| Overload                        | МСВ |  |  |  |
| Residual Current                | RCD |  |  |  |
| Series Arcing Fault             | AFD |  |  |  |
| Parallel Arcing Fault           | AFD |  |  |  |
| Parallel Arcing Fault to PE     | RCD |  |  |  |
| Over Voltage                    | AFD |  |  |  |

|                        | PBA06CA           | PBA10CA           | PBA16CA           | PBA20CA           | PBA25CA           | PBA32CA           | PBA40CA           |
|------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Rated Residual Current | 6A                | 10A               | 16A               | 20A               | 25A               | 32A               | 40A               |
| Pack Quantity          | 1                 |                   |                   |                   |                   |                   |                   |
| Barcode                | 5012739<br>654497 | 5012739<br>654503 | 5012739<br>654510 | 5012739<br>654527 | 5012739<br>654534 | 5012739<br>654541 | 5012739<br>654558 |

| AFDD RCBO: Red LED Status Indication                |                              |  |  |
|---|------------------------------|--|--|
| Constant Lit  | Device Operational           |  |  |
| 1 Flash/Sec ▶ 10 Sec                                | Series or Parallel Arc Fault |  |  |
| 2 Flash/Sec ► 10 Sec                                | Over Voltage >275V           |  |  |
| 5 Flash/Sec   | Self-Test Failure            |  |  |
| Not Lit No Supply Voltage                           |                              |  |  |
| Consult Instruction leaflet for further information |                              |  |  |



**NOTE:** These devices **MUST** be installed by a qualified electrician in accordance with the latest wiring regulations (BS7671).

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| TECHNICAL INFORMATION                             |                              |  |  |  |
|---|------------------------------|--|--|--|
| Arc Fault Detection                               | Yes                          |  |  |  |
| Number of Poles                                   | 1 Pole + switched Neutral    |  |  |  |
| Rated Voltage (Un)                                | 240VAC                       |  |  |  |
| Rated Residual Current                            | 30mA                         |  |  |  |
| Type of Residual Current                          | Type A                       |  |  |  |
| Rated Non-tripping Current                        | 0.5                          |  |  |  |
| Rated Frequency                                   | 50/60Hz                      |  |  |  |
| Rated Short-Circuit Capacity                      | 6kA                          |  |  |  |
| Tripping Characteristics                          | Type C                       |  |  |  |
| Energy Limiting Class                             | 3                            |  |  |  |
| Index of Protection                               | IP20                         |  |  |  |
| Terminals   | Pillar type 1 –25mm²         |  |  |  |
| Mechanical Endurance                              | >10,000 times                |  |  |  |
| Electrical Endurance                              | >4,000 times                 |  |  |  |
| Bus Bar Thickness                                 | 0.8 to 2mm                   |  |  |  |
| Ambient Temperature                               | - 25°C to +45°C              |  |  |  |
| Storage Temperature                               | - 35°C to +60°C              |  |  |  |
| <b>Torque</b><br>(Recommended minimum tightening) | 2.5 Nm                       |  |  |  |
| Dielectric strength                               | 2500V                        |  |  |  |
| Din Rail Mounting                                 | Yes                          |  |  |  |
| Guarantee   | 3 Years                      |  |  |  |
| Conforms To                                       | BS EN 61009-1<br>BS EN 62606 |  |  |  |