



## Eaton 170917

Eaton Moeller series xEffect - FRBm6/M RCBO - residual-current circuit breaker with overcurrent protection. RCD/MCB, 10A, 10mA, MCB trip type D, 1-phase+N, RCCB trip type: A

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|                             |                                                                                                          |
|-----------------------------|----------------------------------------------------------------------------------------------------------|
| <b>PRODUCT NAME</b>         | Eaton Moeller series xEffect - FRBmM RCBO - residual-current circuit breaker with overcurrent protection |
| <b>CATALOG NUMBER</b>       | 170917                                                                                                   |
| <b>PRODUCT LENGTH/DEPTH</b> | 80 mm                                                                                                    |
| <b>PRODUCT HEIGHT</b>       | 75 mm                                                                                                    |
| <b>PRODUCT WIDTH</b>        | 35 mm                                                                                                    |
| <b>PRODUCT WEIGHT</b>       | 0.202 kg                                                                                                 |
| <b>COMPLIANCES</b>          | CE Marked<br>RoHS conform                                                                                |
| <b>CERTIFICATIONS</b>       | CE<br>EN45545-2<br>IEC 61373                                                                             |

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|----------------------------------------------------|----------------------------------|
| AMPERAGE RATING                                    | 10 A                             |
| VOLTAGE RATING                                     | 240 V - 240 V                    |
| SURGE CURRENT CAPACITY                             | 0.25 kA                          |
| VOLTAGE TYPE                                       | AC                               |
| WIDTH IN NUMBER OF MODULAR SPACINGS                | 2                                |
| FEATURES                                           | Concurrently switching N-neutral |
| OPERATING AMBIENT TEMPERATURE - MAX                | 40 °C                            |
| OPERATING AMBIENT TEMPERATURE - MIN                | -25 °C                           |
| PRODUCT RANGE                                      | FRBmM                            |
| RATED CURRENT                                      | 10 A                             |
| RATED FAULT CURRENTS OF PRODUCT RANGE              | 10, 30, 100, 300 MilliAmpere     |
| RATED SWITCHING CAPACITY (IEC/EN 61009)            | 10 kA                            |
| STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT     | 0 W                              |
| TRIPPING CHARACTERISTIC                            | D                                |
| BUILT-IN DEPTH                                     | 75.5 mm                          |
| CURRENT LIMITING CLASS                             | 3                                |
| RATED SHORT-CIRCUIT BREAKING CAPACITY (EN 60947-2) | 15 kA                            |
| AMBIENT OPERATING TEMPERATURE - MAX                | 40 °C                            |
| AMBIENT OPERATING TEMPERATURE - MIN                | -25 °C                           |
| FAULT CURRENT RATING                               | 0.01 A                           |
| HEAT DISSIPATION CAPACITY                          | 0 W                              |
| HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT       | 0 W                              |
| NUMBER OF POLES (PROTECTED)                        | 1                                |
| NUMBER OF POLES (TOTAL)                            | 2                                |
| RATED OPERATIONAL VOLTAGE (UE) - MAX               | 240 V                            |
| RATED SHORT-CIRCUIT                                | 15 kA                            |

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|------|-----------------------------------------------------------------------|
| □□□□ | <a href="#">xEffect_FR_RCCB_FAZ%20MCB.pdf</a>                         |
| □□□□ | <a href="#">eaton-xeffect-frbm6-rcbo-catalog-ca003015en-en-us.pdf</a> |
|      | <a href="#">eaton-xeffect-frbm6m-3d-drawing-007.jpg</a>               |
|      | <a href="#">eaton-xeffect-frbm6m-dimensions.jpg</a>                   |
| □□   | <a href="#">eaton-xeffect-frbm6m-wiring-diagram.jpg</a>               |
|      | <a href="#">eaton-xeffect-frbm6m-characteristic-curve.jpg</a>         |

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|----------------------------------------------------------------|-------------------------------------------------------------|
| <b>BREAKING CAPACITY (IEC 60947-2)</b>                         |                                                             |
| <b>RATED SWITCHING CAPACITY</b>                                | 10 kA                                                       |
| <b>BASIC FUNCTION</b>                                          | Combined RCD/MCB devices                                    |
| <b>MOUNTING METHOD</b>                                         | DIN rail                                                    |
| <b>RATED IMPULSE WITHSTAND VOLTAGE (UIMP)</b>                  | 4 kV                                                        |
| <b>DEGREE OF PROTECTION</b>                                    | IP20                                                        |
| <b>OPERATING AMBIENT TEMPERATURE HINT</b>                      | Keep in mind the derating at temperatures higher than 40 °C |
| <b>TRIPPING</b>                                                | Non-delayed                                                 |
| <b>OVERVOLTAGE CATEGORY</b>                                    | III                                                         |
| <b>POLLUTION DEGREE</b>                                        | 2                                                           |
| <b>IMPULSE WITHSTAND CURRENT</b>                               | Partly surge-proof, 250 A                                   |
| <b>LEAKAGE CURRENT TYPE</b>                                    | A                                                           |
| <b>RELEASE CHARACTERISTIC</b>                                  | D                                                           |
| <b>SENSITIVITY TYPE</b>                                        | Pulse-current sensitive                                     |
| <b>FREQUENCY RATING</b>                                        | 50 Hz                                                       |
| <b>RATED INSULATION VOLTAGE (UI)</b>                           | 500 V                                                       |
| <b>CONNECTABLE CONDUCTOR CROSS SECTION (SOLID-CORE) - MIN</b>  | 1 mm <sup>2</sup>                                           |
| <b>CONNECTABLE CONDUCTOR CROSS SECTION (SOLID-CORE) - MAX</b>  | 25 mm <sup>2</sup>                                          |
| <b>CONNECTABLE CONDUCTOR CROSS SECTION (MULTI-WIRED) - MIN</b> | 1 mm <sup>2</sup>                                           |
| <b>CONNECTABLE CONDUCTOR CROSS SECTION (MULTI-WIRED) - MAX</b> | 25 mm <sup>2</sup>                                          |
| <b>RATED SHORT-CIRCUIT BREAKING CAPACITY (EN 61009)</b>        | 10 kA                                                       |
| <b>RATED SHORT-CIRCUIT BREAKING CAPACITY (EN 61009-1)</b>      | 10 kA                                                       |
| <b>NUMBER OF POLES</b>                                         | Single-pole + N                                             |

|                                 |                                                                      |
|---------------------------------|----------------------------------------------------------------------|
| DISCONNECTION<br>CHARACTERISTIC | Undelayed                                                            |
| TYPE                            | RCBO                                                                 |
| APPLICATION                     | Switchgear for industrial<br>and advanced commercial<br>applications |

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|-----------------|
| PROJECT NAME:   |
| PROJECT NUMBER: |
| PREPARED BY:    |
|                 |



  Eaton House  
30 Pembroke Road  
Dublin 4,    
Eaton.com

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