Eaton BladeUPS Maintenance Bypass Module (MBM)

Features

- Three-Breaker Maintenance Bypass
  - Maintenance bypass breaker, rectifier input breaker and UPS output breaker all rated for 225A @208V (150A @400V) for high availability even as the UPS is serviced
- 6U Rackmount Cabinet
  - 60 kW N+1 maintenance bypass in just 6U of rack space; matching front bezel blends MBM into existing racks of Eaton® BladeUPS® extended battery modules
- Breaker Interlock Bar
  - Ensures correct breaker sequencing during transition to bypass and return to online
- Activate UPS Bypass Mode Switch
  - With the press of this single switch the BladeUPS rack is automatically placed into bypass and the entire system is readied for the transfer of power
- Designed to go into top or bottom of the enclosure (rack)
  - The MBM has three removable conduit landing plates on the top and bottom of the cabinet to ensure cable entry can be accommodated for raised floor or overhead wiring installations

The Eaton BladeUPS Maintenance Bypass Module (MBM) is a fully featured maintenance bypass designed to transfer power from a fully populated 60 kW N+1 BladeUPS system into bypass, allowing maintenance and service to be performed on a de-energized BladeUPS cabinet without affecting power to the critical load. Factory installed 225A @208V (150A @400V) maintenance bypass breaker (MBB), UPS Input Breaker (UIB) and UPS output breaker (UOB). A breaker interlock bar ensures the proper sequencing of the MBB and UOB when bringing the BladeUPS cabinet off and online. The MBM’s Activate UPS Bypass Mode switch simplifies the process of going to bypass even further by providing a single point to transfer all BladeUPS units into bypass, and ready the system for the transfer of power.

The MBM is designed to fit seamlessly into your data center environment while occupying minimal space. The 6U housing features front panels designed to mimic the look of BladeUPS EBM extended battery modules (EBMs) so that it will fit aesthetically into your BladeUPS rack. Behind the removable front panels are four LEDs that highlight the current power flow of the system and enhance the safety and security of on-site operators.

The MBM also features a shunt trip on the bypass breaker for interfacing with remote emergency power-off (EPO) systems, and all breakers have auxiliary contacts (NC and NO available) for breaker on/off sensing for integration with building control or monitoring systems.
## Technical specifications

### General Characteristics
- **Type**: Three-breaker, manual interlock
- **Installation**: Rack mounted, 6U
- **Input & Output Cabling**: Top and bottom entry
- **Designed kVA/kW rating**: 60 kVA/60 kW
- **Color**: Black bezels matching BladeUPS
- **Construction**: NEMA 1, IP 23

### Input/Output Ratings 208V Model 103007415-5208
- **Input Voltage**: 120/208V: Three-phase
- **Frequency**: 50/60 Hz
- **Input Connection**: Hardwire 3P + N + PE
- **Output Voltage**: 120/208V: Three-phase
- **Frequency**: 50/60 Hz
- **Output Connection**: Hardwire 3 or 4W + PE

### Electrical Ratings 208V Model 103007415-5208
- **Breaker Frame**: 225A
- **Trip rating**: 225A
- **Breaker kAIC rating**: 65kA @ 240V

### Input/Output Ratings 400V Model 103007415-5400
- **Input Voltage**: 230/400V: Three-phase
- **Frequency**: 50/60 Hz
- **Input Connection**: Hardwire 3P + N + PE
- **Output Voltage**: 230/400V: Three-phase
- **Frequency**: 50/60 Hz
- **Output Connection**: Hardwire 3 or 4W + PE

### Electrical Ratings 400V Model 103007415-5400
- **Breaker Frame**: 225A
- **Trip rating**: 150A
- **Breaker kAIC rating**: 25kA @ 480V

### Environmental Specifications
- **Ambient Temperature**: 0°C to +40°C (+32°F to +104°F)
- **Storage Temperature**: -20°C to +70°C (-4°F to +158°F)
- **Relative Humidity**: 5-95% non-condensing
- **Altitude**: 2000 meters (6560ft.) at 40°C/104°F
- **Audible Noise**: Less than 50 dBA at 1 meter

### Certifications
- **Safety**: UL 1778 4th edition
- **IEC 60950-1 edition 1**
- **IEC 62040-1-1 edition 1**
- **EMC**: IEC 62040-2 edition 2
- **Quality**: ISO 9001:2000
- **ISO 14001, 2006**
- **Markings**: UL, cUL, CE
- **Hazardous materials**: RoHS, EU Directive 2002/95/EC Cat. 3

### User Interface
- **UPS interface**: Activate UPS bypass mode switch
- **Indicator lamps**: UPS on bypass
- **AC Power to bypass**
- **AC Power from UPS**
- **AC Power to loads**
- **Building interface**: REPO, 120 V external contact required
- **1A/1B Aux switch on all breakers**
- **Control wire harness provided between UPS and breakers**

### Physical Characteristics
- **10.5” H x 17.3” W x 29.6” D**
- **Weight**: 76 lb/34 Kg

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Front panel with cover removed
Rear view of termination points