# 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<sup>®</sup> BladeUPS<sup>®</sup> 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 auxillary contacts (NC and NO available) for breaker on/ off sensing for integration with building control or monitoring systems.



## **Technical specifications**

#### **GENERAL CHARACTERISTICS**

Туре	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, cUI, 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 barness provided be	atween LIPS and breakers

Control wire harness provided between UPS and breakers

#### **PHYSICAL CHARACTERISTICS**

10.5"H x 17.3"W x 29.6"D

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Weight: 76 lb/34 Kg



Front panel with cover removed



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Rear view of termination points

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