

**Maintenance Bypass Cabinet (MBC)  
For TLE-225 to 750kva Single UPS module  
480vac, 3Ø/4W/G**

- Notes:**
- 3-bkr Maintenance Bypass Cabinet with SKRU (Line-up-and-match)**
1. Maintenance Bypass Cabinet (MBC) with SKRU, 480VAC, for TLE series, 1.0PF, UPS module
  2. Main Breakers: MIB & MBB (xxxAT), 80% rated, molded case, manually operated breaker. Refer to Table 1 for breaker current rating.
  3. UPS Input Breaker: UIB (xxxAT), 80% rated, unless otherwise specified, molded case, manually operated breaker. Refer to Table 1 for breaker current rating.
  4. Bus: Copper
  5. Neutral: 200%
  6. Aux Contact: 2A/B on MBB breaker only
  7. Control: SKRU with Kirk Key on MBB and MIB breakers.
  8. Equipment ground
  9. 10. Refer to national electric code for acceptable external wiring practice.
  10. An upstream overcurrent protection with current rating of 125% of the UPS rectifier input current rating must be installed at the MBC input (E1-E3).
  11. The external wiring is rated at 75 °C or 90 °C
  12. The external wiring material and labor to be provided and paid by others.
  13. Maintenance Bypass Input must come from a 3Ø/4W/G (wye), solidly grounded electrical system.
  14. The control and power wirings must be installed in separate conduits.
  15. Refer to Table 2 and Table 3 for control wiring from MBC to UPS module.

**LEGEND:**  
**MIB:** UPS MODULE ISOLATION BREAKER  
**MBB:** MAINTENANCE BYPASS BREAKER  
**UIB:** UPS INPUT BREAKER

Project Name: STD		Point of Contact:		Equipment Part Number: See table	
GE Critical Power	Issued by: PH	Issued date: 06/07/13	Scale: NONE	Drawing Title: System 1L for TLE-225-750kva & 3-bkr, line up & match, MBC, w/ SKRU	
	Revised by: PH	Revised date:	Rev. No.: 1.0	Drawing No.: <b>1L-MBCTLxx43K-00</b>	Sheet No.: 1 of 2

Table 1- Maintenance Bypass Cabinet (MBC) Breaker Schedule				
UPS (KVA)	MBC PART NUMBER	MBB/MIB (Trip)	UIB (Trip)	kAIC@ 480Vac
225	MBC224-35400T-K300	350AT	400AT	35
	MBC224-35400T-K600	350AT	400AT	65
250	MBC254-40450T-K300	400AT	450AT	35
	MBC254-40450T-K600	400AT	450AT	65
400	MBC404-60600T-K300	600AT	600AT*	35
	MBC404-60600T-K600	600AT	600AT*	65
500	MBC504-80800T-K500	800AT	800AT*	50
	MBC504-80800T-K600	800AT	800AT*	65
750	MBC754-A0A20T-K500	1000AT*	1200AT*	50
	MBC754-A0A20T-K600	1000AT*	1200AT*	65

NOTE: \* = 100% breaker.

Table 2- Control Wiring From MBC to UPS module- Without eBoost (see this drawing, page 1)					
Terminating point In MBC	Terminating point In UPS	Wire Size	Maximum Volt. & current	Circuit Function	Note
TB2-1	X1-12 (CIC card- IM0005)	18AWG	24V 1.25A	SKRU control (Key can be removed if UPS is on bypass)	Twisted pair
TB2-2	X1-13 (CIC card-IM0005)				
TB2-4	X4-1 (IM0108 card)	18AWG	24V 1.25A	UPS control (UPS transfer is prohibited during testing)	Twisted pair
TB2-5	X4-2 (IM0108 card)				

Table 3- Control Wiring From MBC to UPS module- With eBoost (see this page, Figure 1)					
Terminating point In MBC	Terminating point In UPS	Wire Size	Maximum Volt. & Current	Circuit Function	Note
TB2-1	X1-12 (CIC card- IM0005)	18AWG	24V 1.25A	SKRU control (Key can be removed if UPS is on bypass)	Twisted pair
TB2-2	X1-17 (CIC card-IM0005)				
TB2-4	X4-1 (IM0108 card)	18AWG	24V 1.25A	UPS control (UPS transfer is prohibited during testing)	Twisted pair
TB2-5	X4-2 (IM0108 card)				

Terminating point In UPS	Terminating point In UPS	Wire Size	Maximum Volt. & Current	Circuit Function	Note
X1-13 (CIC card- IM0005)	X1-16 (CIC card- IM0005)	18AWG	24V 1.25A	SKRU control (Key can be removed if UPS is on bypass)	<b>JUMPER</b>

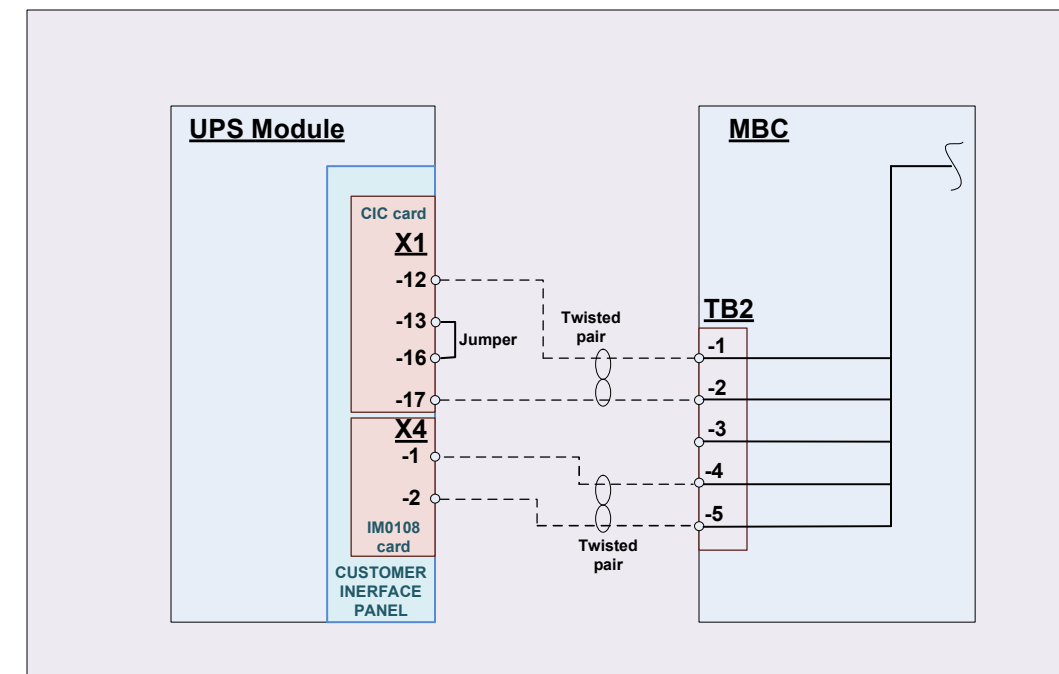


Figure1: SKRU and UPS control for UPS module with eBoost.

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