



Maintenance Bypass Switch





Westinghouse Maintenance Bypass Switch

The Westinghouse Maintenance Bypass Switch is a UL1008 listed device that provides a simple and effective means for bypassing uninterruptable power supplies while maintaining continuity of power to the critical computer loads. A Maintenance Bypass Switch is a requirement on every UPS installation in order to accommodate the maintenance and testing of the UPS System.

The most typical applications of the MBS are on Static or Rotary type UPS Systems of 50kVA or greater.

- Static UPS Systems may require maintenance to the inductors or the capacitors that are needed for filtering and SCR commutation.
- Motor Generator Systems, while extremely reliable require more maintenance to the mechanical moving parts. Bearings and couplings need to be greased and examined to ensure proper functioning.

THE WESTINGHOUSE BYPASS SWITCH IS THE FIRST MBS TO OFFER A UL1008 LISTING. AS A TRANSFER SWITCH IT CARRIES A 100% RATING AND IS COMPATIBLE WITH UPS SYSTEMS UP TO 750KVA AT 480V.

Features

- UL1008 Listing – File E61639.
- Make before break electrical operation.
- Lockout circuit to be wired into the UPS bypass authorization.
- Pilot devices to show UPS position "Normal" and "Bypassed".
- Pilot device to show "Lockout" enabled.
- Reliable manually initiated electrical operation.
- High interrupting ratings are standard.
- Molded case switch or circuit breaker designs are available.
- Solid neutral connections are standard.

Benefits

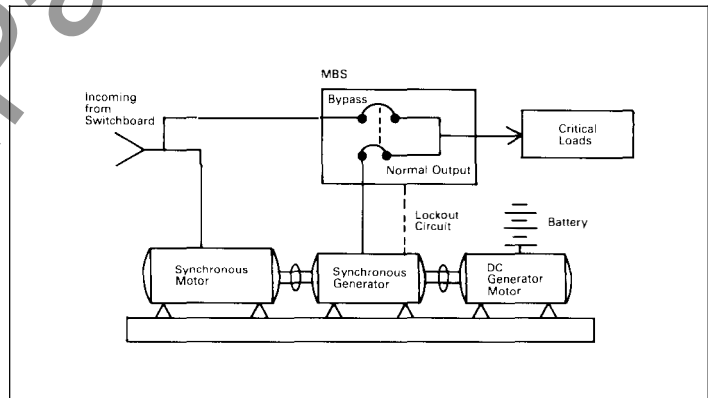
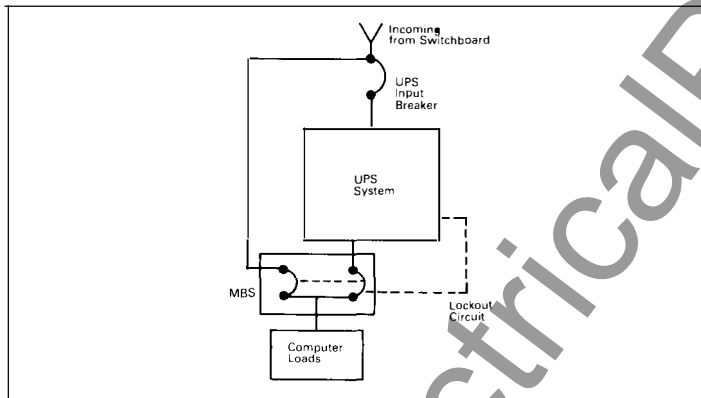
- Safe and reliable operation is ensured due to the simple and durable switching design.
- Unauthorized bypass is prevented by the need of UPS System to send the bypass authorized signal.

General Specifications

Frequency	60 Hz ①
Line Characteristics	
• Nominal Line Voltage	+15%, -25%
Operating Temperature	0°C-70°C 32°F-160°F
Storage Temperature	-20°C-85°C
Humidity	95% Non-condensing

① Call Westinghouse for applications other than 60 Hz.

- 100% current ratings makes selection to the UPS kVA ratings easy to accomplish.
- Use of high interrupting rating switches or breakers makes the Maintenance Bypass Switches adaptable to systems with high levels of available fault current.



Application with Static UPS System

Application with Rotary UPS System

KVA Rating, Full Load Current and MBS Size Cross Reference Chart

208 V		480 V	
KVA Rating	FLA	MBS Rating	FLA
30	83.3	100	36.1
50	139	150	63
65	180	225	81
75	208	225	90
100	278	300	120
125	347	400	150
150	416	600	180
200	555	600	240
225	625	800	271
250	722	800	301
300	833	1000	361
350	972	1000	420
400			480
450			540
500			601
600			720
750			902

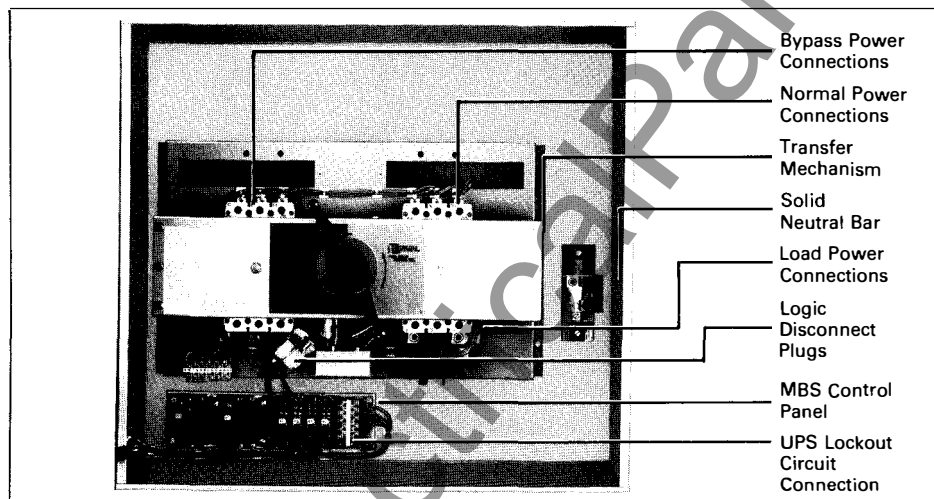


Catalog Numbering System

Type Switch	Construction	Poles	Ampere Rating	Voltage ^①	Enclosure
MBS	B	3	0300	X	S
Maintenance Bypass Switch	M – Molded Case Switch	2 – 2 Pole 3 – 3 Pole	0100-100 Amp 0150-150 Amp	B – 208/60 W – 240/60	K – Open S – NEMA 1
	B – with Thermal Magnetic Trip		0200-200 Amp 0225-225 Amp 0300-300 Amp 0400-400 Amp 0600-600 Amp 0800-800 Amp 1000-1000 Amp	X – 480/60	J – NEMA 12 R – NEMA 3R L – NEMA 4 ^② D – NEMA 4X ^②

① Contact Westinghouse for other voltage ratings and 50 Hz ratings.

② Call Factory for Dimensions.



Maintenance Bypass Switch

Standard Withstand, Closing and Interrupting Ratings^③

Transfer Switch Amp Rating	Rating when used with Upstream Circuit Breaker			Rating when used with Upstream Fuse			
	Suggested Breaker Rating ^④	240V	480V	600V	Max Fuse Rating	Fuse Type	480V
100	100	100	65	25	200	J,T	200
150	150	100	65	25	400	J,T	200
225	225	100	65	25	400	J,T	200
300	300	100	65	25	400	J,T ^⑤	200
400	400	65	35	25	600	J,T	200
600	600	65	50	25	800/1200	J,T	100/200
800	800	65	50	25	1200/1600	L	100/200
1000	1000	65	50	25	1600	L	200

Note: To attain the maximum rating shown in the chart when protected by an upstream breaker the upstream device must have an equivalent interrupting rating.

If the MBS includes a thermal magnetic trip unit (type MBSB) then no additional upstream protection is required in order for the MBS to attain the interrupting rating shown.

③ Tested in accordance with UL1008.

④ For maximum breaker rating in circuits where the transfer switch is evaluated as a "motor branch circuit conductor" refer to the NEC Section 430-25 for sizing.

⑤ Also can use Class RK5 fuse with 100KA rating.

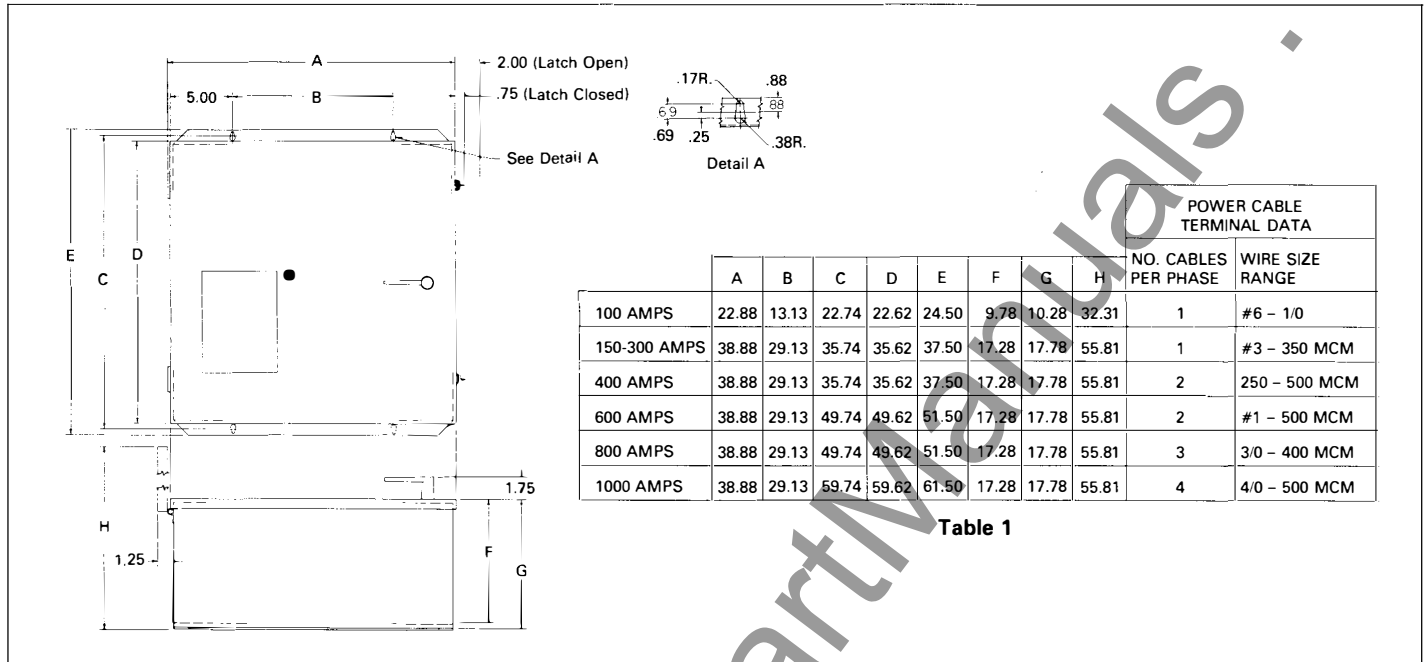


Table 1

Outline Dimensions and Terminal Data

More Information

Instruction Leaflet IL 16910
 Pricing - PL 29-921
 Westinghouse Transfer Switches - 29-926
 Engineers Guide - SA1XXXX

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