
PRODUCT BROCHURE

Cyberex[®] Mission Critical (MC)

200–800A digital static transfer switch
and PDU integration



Mission Critical MC

The mission critical (MC) provides redundant operation using two sources feeding one common group of output distribution devices. By integrating a Cyberex SuperSwitch®3 digital static transfer switch (DSTS) and Cyberex power distribution unit (PDU), the MC provides the highest level of customization for diverse equipment loads and maximum growth. Coupled with advanced communications and branch circuit and Sub-feed circuit management, the MC is the key design element for ensuring maximum uptime for your facility.



SuperSwitch®3 provides the highest level of reliability in the marketplace. Designed with a true fault tolerant architecture, SuperSwitch®3 is installed user base of 7000 attests to its reliability.



Proven components and performance

- Integrated SuperSwitch®3 DSTS and PDU maximizes reliability and availability of the entire critical power system
- Fault-tolerant DSTS design eliminates single point of failure
- Dynamic inrush restraint (DIR) decreases transformer inrush and increases system reliability
- Primary DSTS design options with input positioned DSTS offer maximum flexibility
- Software-guided breaker operation reduces possibility of operator error
- Multiple panelboard and breaker configurations provide maximum design flexibility
- Comprehensive system and circuit monitoring provides ultimate visibility of operating data
- Branch circuit and Sub-feed monitoring (optional) collects, organizes and manages detailed information about each circuit
- Remote communications uses standard protocols to interface with a building management system (BMS)
- Compact footprint maximizes valuable floor space and reduces power cabling costs
- Easy maintenance access means low MTTR – mean time to repair



Integrated PDU provides the highest level of customization for diverse equipment loads.

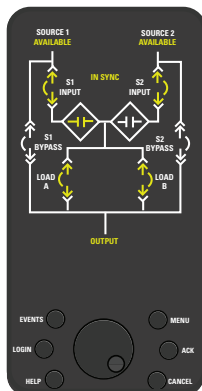
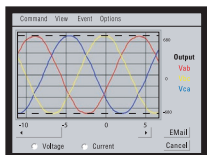
Mission Critical (MC) provides added reliability to any architecture



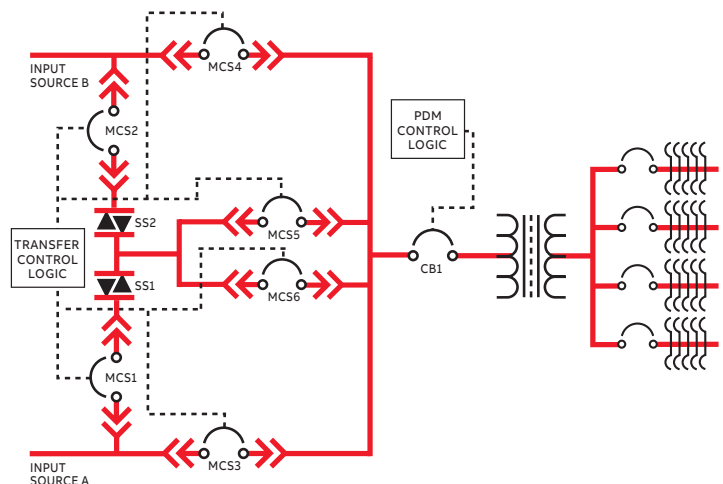
Technical specifications

Electrical	
kVA	75–300kVA
Input	480V, 3-phase, 3-wire + ground
Input voltage	480V @ 60Hz
Output	208/120V, 3-phase, 4-wire + ground
Output voltage	208/120V 480/277V @ 60Hz
Transformer type	Copper windings, dual electrostatic shield
Transformer ratings	K-13 (standard); K-20 (optional)
Transformer efficiency	DOE 2016 compliant
Transformer temperature rise	150°C (standard) 115°C (optional)
Transformer inrush	8X (standard), 11X or 5X (optional)
Transformer compensation taps	2 1/2% (4 x FCBN, 2 x FCAN)
Transformer insulation	220°C
Neutral rating	200%
Distribution sidecar options	
Panelboards	Up to 4 – 168 poles
Sub-feed breakers	Up to 24 – 100, 150, 225, 400A
General operating	
Operating temperature	0 to 40°C
Cooling	PDU: convection, STS: dual redundant fans 400A and greater
Audible sound	<65dBA – maximum
Efficiency	PDU: 97.5% – typical, STS: 99%
Digital static transfer switch section	
Transfer time	4 milliseconds – sense plus transfer time
Controls	Digital signal processor – DSP-based
Display	High-res graphical user interface
Type II	Fuseless current path
SCR type	Hockey-puck
Bypass	6 non-automatic breakers with software guided bypass sequence
Control power	Dual power bus fed by three sources
Redundant design	No single point of failure

Providing triple redundant system status, SuperSwitch³'s independent mimic panel, LCD and system LEDs (not shown) quickly provide system information.



PDU section	
Single transformer	Positioned at output of 480V DSTS
Panelboards	Up to 6 – 252 poles
Sub-feed breakers	Up to 24 – 100, 150, 225, 400A
I-line	Up to 2 – 800A I-lines with 10 removable breakers
Communications	
Modbus	RTU – RS-485, TCP – ethernet
Web server	Access with any browser via internet
E-mail	DSTS annunciates selected events
Metering and event management	
Voltage and current	DSTS and PDU input and output
Power and energy	DSTS and PDU input and output
Branch circuit management	Optional – up to 168 poles per module
Sub-feed management	Optional – up to (24) 3-pole, 4-wire circuits
Event log	Up to 2500 time-stamped alarms and warnings
STS waveform capture	Optional – records (25) 5 cycle events (STS only)
Options	
Circuit monitoring	
PDU primary/secondary SPDs	
Standards	
Safety (DSTS)	ETL listed to UL 1008S cETL listed to CAN/CSA-22.2 No. 178
Safety (PDU)	ETL listed to UL 609501-1 and UL 891 cETL listed to CAN/CSA-22.2 No. 60950-1
EMC	FCC compliant (part 15)
Enclosure	NEMA 1
Dimensions	
Height	77.4" (196.6 cm)
Depth	34.0" (86.4 cm)
Width	Consult factory
Weight	(MC11) 2,500 lbs (1,134 kg) to 3,900 lbs (1,769 kg)



MC11 features an input-positioned DSTS and a single transformer.

Power Protection

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Additional information

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