



Product brochure

# Cyberex<sup>®</sup> FaultGuard<sup>™</sup> RPP Features & benefits

# Cyberex® FaultGuard™ RPP key benefits

## Touch safe

The Cyberex FaultGuard RPP utilizes a touch safe design, shielding users from exposed electrical parts. Unlike traditional RPPs its panelboard busway is encased in resin.

### What this means for the owner

The Occupational Safety and Health Administration (OSHA) is imposing stricter regulations on data centers, ensuring that proper policies and procedures are in place when employees perform live work on energized equipment. By installing Cyberex touch safe solutions in an RPP, the customer can show they are taking a proactive approach to worker safety, greatly reducing the shock hazard when working the system while energized when compared to other standard RPPs.

## Current limitation

The Cyberex FaultGuard RPP utilizes UL listed current limiting main and branch circuit breakers that clear faults in less than one quarter of an electrical cycle.

### What this means for the owner

This ensures the highest level of protection for sensitive IT equipment and downstream components. If a fault was to occur in a data center, current limiting protection would mitigate its destructive impact on system components, significantly reducing downtime, repairs and replacement cost. Overcurrent protective devices, (e.g. circuit breakers) also have an impact on the two most important variables of an arc flash event – the time, or how quickly the overcurrent device opens, and fault current magnitude, or how high the fault current rises before it is cut off. Current limitation is the driving factor to significantly reduce the arc flash potential in your data center. As discussed above, OSHA is extremely strict regarding its laws on energized work. If an arc flash event was to take place in a data center, the installation of current limiting devices may be a supportable methodology for trying to reduce the hazard for workers.

## Selective coordination

Cyberex RPPs provide inherent selective coordination between main and branch overcurrent devices.

### What this means for the owner

Selective coordination defines a system's ability to isolate a fault. By isolating faults where they occur, selectively coordinated systems significantly increase reliability and remove concerns of a system blackout due to cascading circuit breakers. In a data center this mean keeping critical loads powered on. In a selectively coordinated system a fault occurring at a server rack is contained and may only take down one server or rack. That same fault occurring on a system that was not designed to be selectively coordinated may be responsible for the unnecessary downtime of several rows of sever racks or worse.



# Cyberex® FaultGuard™ RPP main CBs

## Tmax CB

T3				60 – 225A		
	Voltage	Interrupting rating	Coordination with PL CBs			
T3N	240V	50kAIR	35kA			
	480V	25kAIR	14kA			
T3S	240V	65kAIR	35kA			
	480V	35kAIR	14kA			
T4				20 – 250A		
	Voltage	Interrupting rating	Coordination with PL CBs			
T4N	240V	65kAIR	35kA			
	480V	25kAIR	14kA			
T4S	240V	100kAIR	35kA			
	480V	35kAIR	14kA			
T5				300 – 600A		
	Voltage	Interrupting rating	Coordination with PL CBs			
T5N	240V	65kAIR	35kA			
	480V	25kAIR	14kA			
T5S	240V	100kAIR	35kA			
	480V	35kAIR	14kA			

### NOTES

- Main and branch circuit breakers selectively coordinated up to 35kA @ 240V (or less) and 14kA @ 415V or 480V. (only with ABB Tmax)
- Main Lug Only (MLO) – 10kA Panel SCCR
- PL700 Circuit Breakers: Standalone IR of 10kA
- Use K curve CBs in data center application.
- Available branch amp sizes:
  - 1 to 100A @ 240V or less (Limited number of 50A+ poles allowed per panel)
  - 1 to 25A @ 277/480V or 415V

## Cyberex RPP comparison

RPP series	Cost	Current limiting	IP rating	Interrupting rating	Selective coordination	Max coordination level	Flexibility
Cyberex FaultGuard RPP	\$\$\$	Yes	Touch Safe	35kAIR at 240V or less, 14kAIR at 480V	Yes	35kA at up to 240V, 14kA at 480V (with main CB)	Add/remove plug in branch breakers with minimal exposure to electrical hazard
Cyberex Fused HPP	\$\$\$\$	Yes	Finger Safe	200kAIR at up to 600V	Yes	200kA at up to 600V (with main fuse)	Change branch fuse ampacities without de-energizing main or disturbing other panel loads
Cyberex RPP II	\$\$	No	No	22kAIR at up to 240V	No	NA	Limited

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