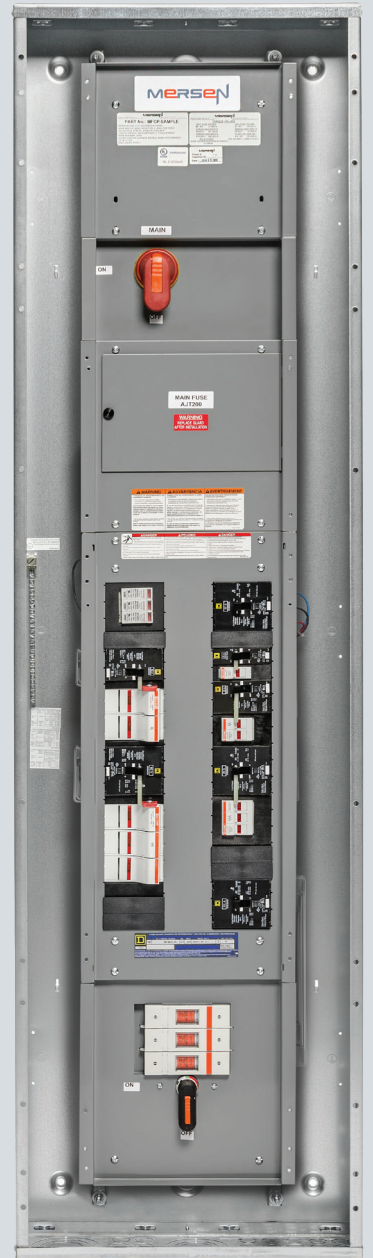




BRANCH CIRCUIT PROTECTION

FUSED COORDINATION PANELBOARD FAQs



MFCP FREQUENTLY ASKED QUESTIONS

Selective Coordination is required in several locations as defined in the National Electrical Code® (NEC). Mersen's Fused Coordination Panelboard (MFCP) can simplify the process in achieving code compliance for designers. These panels are provided with a default short circuit current rating (SCCR) of 200kA and provide overcurrent protection through a combination of a circuit breaker and a fuse. The circuit breaker is designed to operate on overloads up to two times their rating and the fuse will operate for faults over that value, and up to 200kA.

QUESTION:

What if I need more circuits in a panel, than the specific configuration can house?

ANSWER:

In specific specifications where Mersen's panels do not have proper space for newly installed branch circuits, a second section can be added. In this case Mersen would provide feed through lugs in section 1, and a main lug only panel for section 2. The number of spaces available in section 1 will depend on the main configuration and panel ampere rating.

QUESTION:

What voltage ratings are available for the MFCP?

ANSWER:

The panel and all branch devices are rated 600V maximum. The application voltage will only change the rating of the internal SPD, if selected.

The internal SPD options are 120/208V, 277/480V, or 347/600V, all Wye connectd, 75kA surge capacity per phase.

QUESTION:

Can I change a fused breaker in the MFCP to a different rating?

ANSWER:

Fused breakers for branch circuit protection are available for sale and field installation:

MFCP branch protection part numbers					
Part number*		Poles	Current rating	Fuse (included)	
Left side of Panel	Right side of panel				
MFCP-15-1-L	MFCP-15-1-R	1	15A	ATDR30	
MFCP-15-2-L	MFCP-15-2-R	2			
MFCP-15-3-L	MFCP-15-3-R	3			
MFCP-20-1-L	MFCP-20-1-R	1	20A		
MFCP-20-2-L	MFCP-20-2-R	2			
MFCP-20-3-L	MFCP-20-3-R	3			
MFCP-25-1-L	MFCP-25-1-R	1	25A		
MFCP-25-2-L	MFCP-25-2-R	2			
MFCP-25-3-L	MFCP-25-3-R	3			
MFCP-30-1-L	MFCP-30-1-R	1	30A		
MFCP-30-2-L	MFCP-30-2-R	2			
MFCP-30-3-L	MFCP-30-3-R	3			
MFCP-35-1-L	MFCP-35-1-R	1	35A		AJT60
MFCP-35-2-L	MFCP-35-2-R	2			
MFCP-35-3-L	MFCP-35-3-R	3			
MFCP-40-1-L	MFCP-40-1-R	1	40A		
MFCP-40-2-L	MFCP-40-2-R	2			
MFCP-40-3-L	MFCP-40-3-R	3			
MFCP-50-1-L	MFCP-50-1-R	1	50A		
MFCP-50-2-L	MFCP-50-2-R	2			
MFCP-50-3-L	MFCP-50-3-R	3			
MFCP-60-1-L	MFCP-60-1-R	1	60A		
MFCP-60-2-L	MFCP-60-2-R	2			
MFCP-60-3-L	MFCP-60-3-R	3			

* MFCP branch protection devices are built to be installed on one side of the panel or the other. Please contact factory for 100A branch circuits.

For fused breakers up to 30A, the devices may be swapped out 1 for 1. When the fused breakers are rated for 35A - 60A, the breakers will need more space (1.5 times the space of a <30A fused breaker), the user should ensure that the proper amount of . For 70A-100A branch protection, please consult the factory, as a second section or other field modifications/parts may need to be installed.

MFCP FREQUENTLY ASKED QUESTIONS



QUESTION:

What about replacing a fuse after it opens?

ANSWER:

In Mersen's design, the fuses will not blow often, as overloads and some faults are covered by the series breaker which can be reset with no need to replace the fuse. However standard Class CC and Class J fuses in three current ratings are used in the panel, and may be ordered separately.

- **For each 0-30A fused breaker:** each branch uses an ATDR30 fuse
- **For Each 35A-60A fused breaker:** AJT60
- **For Each 70A-100A fused breaker:** AJT100 (or AJT70, AJT80, AJT90, if specified)

Class UL fuses of the same current rating from different manufacturers may also be used, but is not recommended. The specific performance and time current characteristic may make a difference in the crossover point between the fuse and breaker operation.



QUESTION:

What main wire sizes are accepted in the MFCP?

ANSWER:

For 250A Panels:

- MLO: (1) #6-350kcmil
- 100A Main: (1) #14 - 2/0
- 200A Main: (1) #6-300kcmil

For 400A Panels:

- MLO: (2) 1/0-300kcmil
- 100A Main: (1) #14 - 2/0
- 200A Main: (1) #6-300kcmil
- 400A Main: (1) #2 - 600kcmil

For 600A & 800A Panels:

- 600A MLO: (1) 3/0-300 Al or Cu & (1) 3/0-500 Al or Cu
- 800A MLO: (2 or 3) 3/0-750 Al or Cu
- 400A - 600A Main Switch: (2) 3/0-300 Al or Cu
- 800A Main Switch: (3) 3/0-300 Al or Cu

On 250A and 400A panels, sub feed lugs (SFL) may be field or factory added to MLO mains. For 600A and 800A panels with MLO mains, SFL may be factory installed.



QUESTION:

Can the panels be fed from the top or bottom?

ANSWER:

Mersen will build the panel as it is entered into the submittal approved by the customer.



QUESTION:

Is the MFCP offered with copper or aluminum bus?

ANSWER:

The MFCP is provided with copper bus as a standard; aluminum may be provided as a special order item for most configurations.



QUESTION:

Is the MFCP offered with bonded or isolated neutral block?

ANSWER:

Each MFCP comes with a neutral kit that can be installed either isolated from the grounding system or bonded using the provided lug or terminals.



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