

MCA

Electrical Distribution . Controls . Metal Fabrication

CAPABILITIES
PRODUCTS & SERVICES



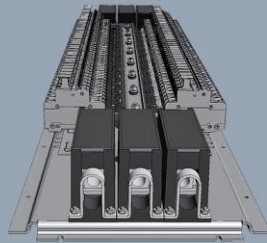
Established in 1904 MCA Fabrication provides manufacturing services and produces electrical products in a 135,000 sqft facility located just outside Nashville.

LOW VOLTAGE ENCLOSURES



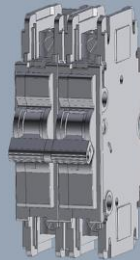
MCA JANUS Series Wall Mount and Floor Mount Type 1, 3R, 4, 4X

POWER DISTRIBUTION PANELBOARDS



UL67 Power Distribution Panelboards 600VAC 250-400A up to 200kA

MINIATURE CIRCUIT BREAKERS



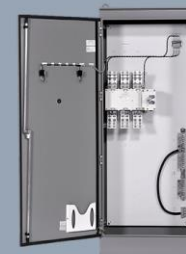
UL Circuit Breakers 120/240/480VAC 1-63 AMP

MEDIUM VOLTAGE ENCLOSURES



MCA JANUS Series Medium Voltage Termination Housings

ENCLOSED DISCONNECTS



UL508 Enclosed Disconnects Fused / Non-Fused / MTS 600VAC 100-1200 AMP

METAL FABRICATION SERVICES



Metal components and assemblies built to customer specifications

Customer & Project Profile

Target Partners

Companies that do not assemble or manufacture
 Companies that assemble but do not manufacture

MCA can provide product engineering, certification,
 manufacturing, and assembly services.



Powder Coating

Carbon steel,
 aluminum, copper,
 stainless steel,
 galvanized steel

707-foot overhead
 conveyor with 3 stage
 zirconium salt washer

Plating

Carbon steel, aluminum,
 copper, stainless steel

Tin plating



Stamping

Carbon steel, aluminum,
 copper, stainless steel,
 galvanized steel

Any gauge
 Single shot or progressive dies
 60 to 150 ton presses

Forming

Carbon steel, aluminum,
 copper, stainless steel,
 galvanized steel

Any gauge
 150 ton brake
 Up to 14 feet in length



Welding

Carbon steel, aluminum,
 stainless steel, galvanized steel

Any gauge
 Bar, tube, sheet
 MIG / TIG / Laser stations
 Robotic weld stations
 Spot weld station

Machining

Carbon steel, aluminum,
 copper, stainless steel

Tap / Drill / Saw / Mill



Mechanical Assembly

Carbon steel, aluminum,
 copper, stainless steel
 galvanized steel

Mechanical fasteners
 PEMs / Rivets

Packaging

Assembly Services
 Packaging and Labeling

MCA FABRICATION Wall Mount Enclosures



Certification

E519920
UL508A and CSA C22.2 No. 94
Type 1, 3R, 3RX, 4, 4X, 12

Finish

Enclosure Body – ANSI 61 grey (standard)
Backpanel – Sky White (standard)
Custom colors available

Construction

All continuous welded seams finished smooth
Heavy-duty hinges with stainless pins and hardware
Quarter turn latches
Formed lip around enclosure to divert liquids
Gasketed doors to prevent dust and water penetration

Note

New painted galvanized 3RX and 4RX ratings
Specializing in custom sizes and configurations

ORDERING CODE									
Series									
J	Janus								
Product									
E	Enclosure								
Type									
W	Wall Mount								
Size A (Height) INCHES									
16	Inches								
20	Inches								
24	Inches								
39	Inches								
36	Inches								
42	Inches								
Size B (Width) INCHES									
12	Inches								
16	Inches								
20	Inches								
24	Inches								
30	Inches								
Size C (Depth) INCHES									
6	Inches								
8	Inches								
10	Inches								
12	Inches								
16	Inches								
Rating ENVIRONMENTAL									
T1	Type 1								
T3R	Type 3R								
T4	Type 4								
T4X	Type 4X								
T12	Type 12								
J	E	W	16	x	12	x	6	T1	Ordering Example

ORDERING CODE									
Series									
J	Janus								
Product									
E	Enclosure								
Type									
F	Floor Mount								
Size A (Height) INCHES									
60	Inches								
74	Inches								
80	Inches								
Size B (Width) INCHES									
24	Inches								
32	Inches								
40	Inches								
Size C (Depth) INCHES									
19	Inches								
24	Inches								
30	Inches								
Rating ENVIRONMENTAL									
T1	Type 1								
T3R	Type 3R								
T4	Type 4								
T4X	Type 4X								
T12	Type 12								
J	E	F	60	x	24	x	19	T1	Ordering Example



MCA FABRICATION Medium Voltage Enclosures



Certification

UL File E519920
 UL508A & CSA 22.2 No 14-18
 Built to ANSI standards
 Type 3R

Finish

Enclosure Body – Munsell Green (standard)
 Backpanel – Sky White (standard)
 Custom colors available

Construction

All continuous welded seams finished smooth
 Heavy-duty hinges and hardware
 Formed lip around enclosure to divert liquids
 Parking stands (standard)
 Removable backpans
 Base extensions available



SELECTION CHART

Single Phase

Dimensions	15kV - 200A			25kV & 28kV - 200A			35kV - 200A		
	2 way	3 way	4 way	2 way	3 way	4way	2 way	3 way	4 way
30H x 30W x 22D	X	X	X	X	X	X	X	X	X

Dimensions	15kV & 25kV - 600A			35kV - 600A		
	2 way	3 way	4 way	2 way	3 way	4way
30H x 30W x 22D	X	X	X	X	X	

Three Phase

Dimensions	15kV - 200A			25kV & 28kV - 200A			35kV - 200A		
	2 way	3 way	4 way	2 way	3 way	4way	2 way	3 way	4 way
30H x 66W x 22D	X	X	X	X	X	X	X	X	

Dimensions	15kV & 25kV - 600A			35kV - 600A		
	2 way	3 way	4 way	2 way	3 way	4way
30H x 84W x 22D	X	X	X	X	X	

MCA FABRICATION UL67 & CSA22.2 Panelboard Assemblies



3 US Patents

Patented bus bar architecture

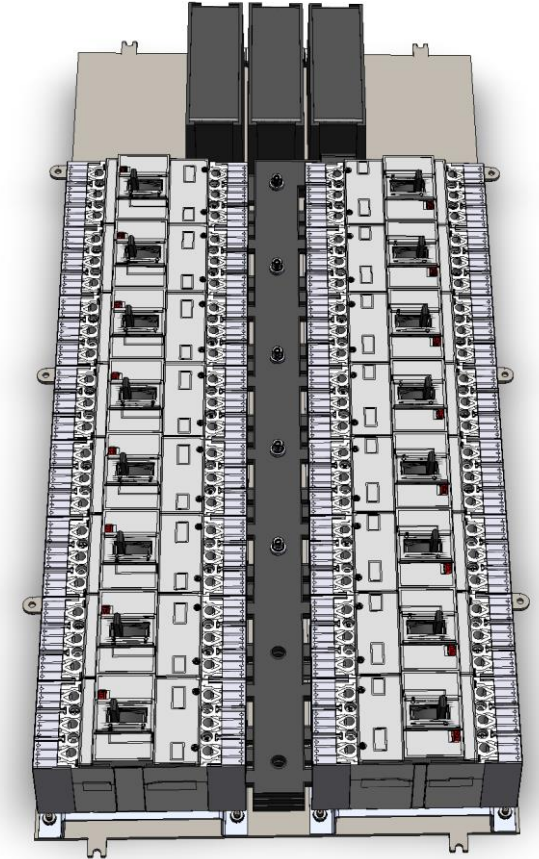
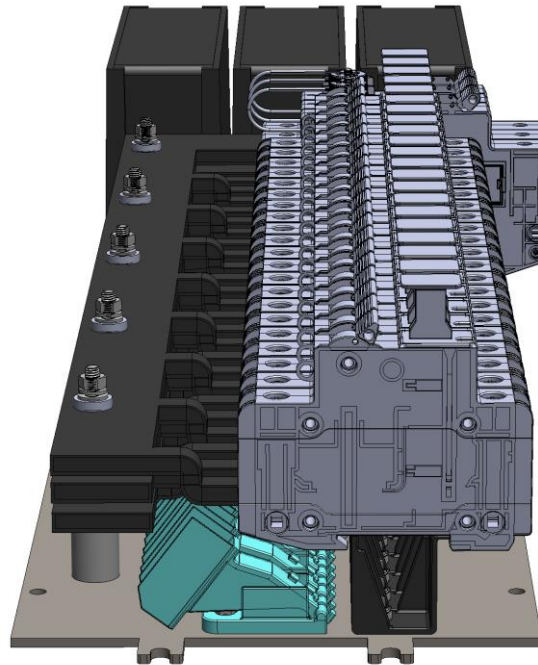
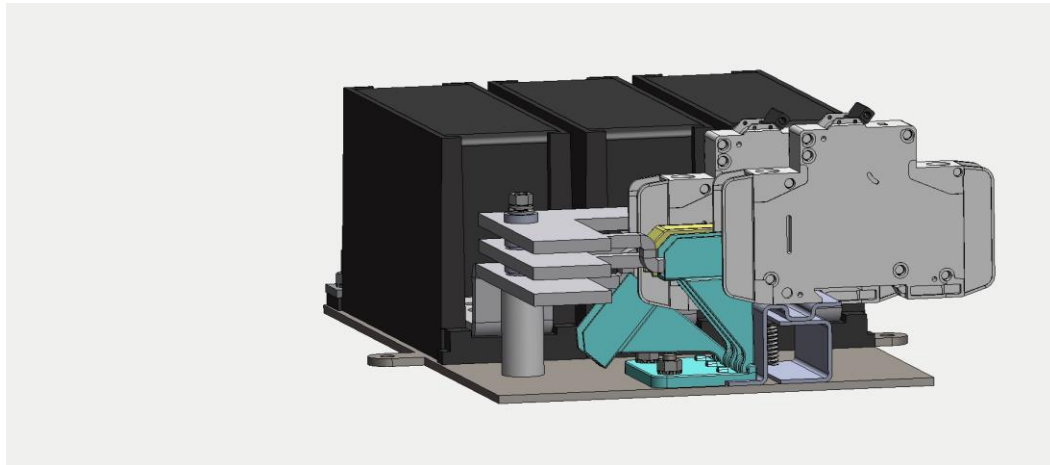
No other manufacturer can use seamless "comb style" bus bar

Patented insulation

No other manufacturer can use individually insulated bus bar

Patented movable louvers

No other manufacturer can use movable "touch safe" insulating louvers on branch circuits



Mechanical Characteristics

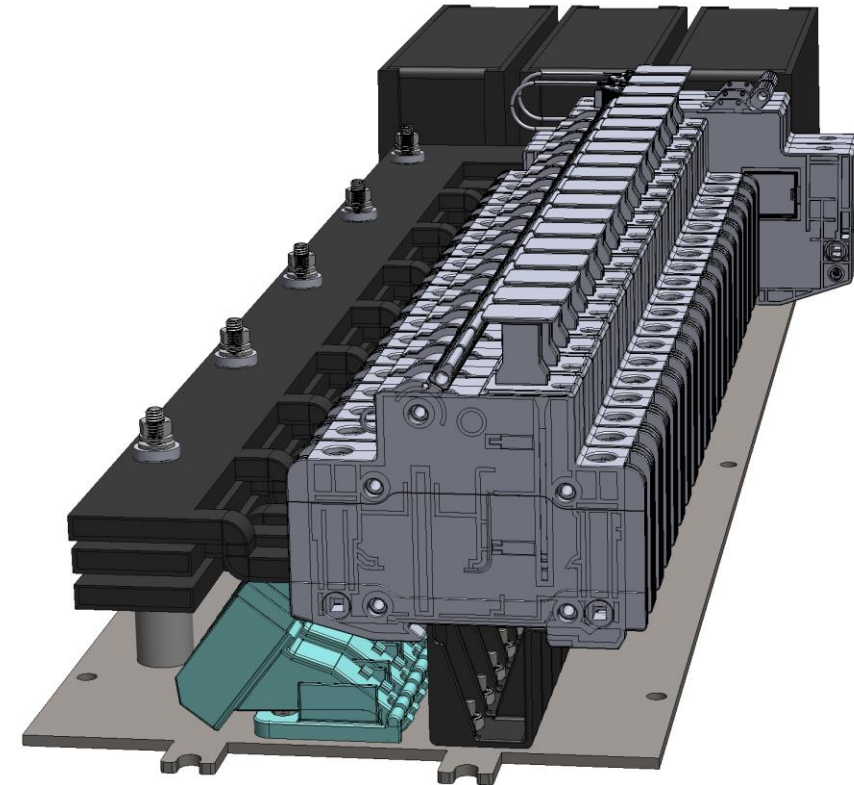
US Patent Number	9,197,039 / 9,293,897 / 11,329,457
cULus Certification	UL67, CSA22.2
IEC Certification	IEC60529 IP20 Pending
Touchsafe Design	Personnel have no exposure to energized components during servicing or operating any portion of the system

Electrical Characteristics

System Ampacity	150A, 225A, 400A
Branch Circuit Ampacity	32A, 63A, 100A
Voltage Rating	120, 240, 277, 480, 575, 600VAC
Voltage Type	Delta or Wye / 1ph or 3ph / 2,3, or 4 wire
Withstand	10kA to 65kA Breakers & 200kA Fuses
Neutral	100% or 200% / Linear or Non-linear Loads

Configurations

Enclosure	UL50 Type 1
Interior Only	Available as Single Unit
Main Incoming	Main Lug or Main Breaker
Single Cable	#4-4/0 Compression Lug
Single Cable	#4-4/0 Crimp Lug
Parallel Cables	#8-1/0 Compression Lug
Parallel Cables	#8-1/0 Crimp Lug
Branch Configuration	Single or Double Column
Circuits	12, 24, 36, 48, 60, 72, 84



MCA FABRICATION UL67 & CSA22.2 Panelboard Assemblies

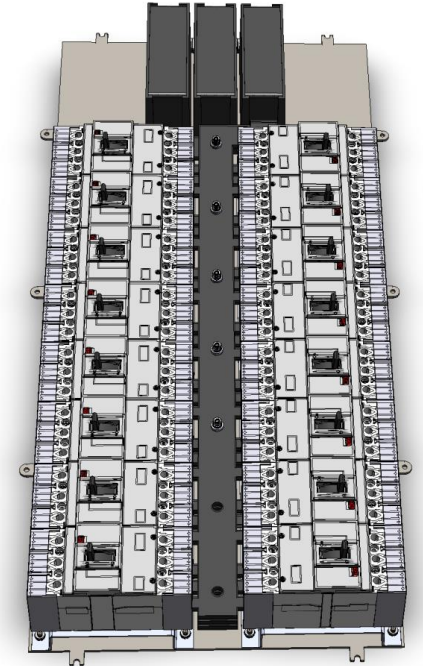
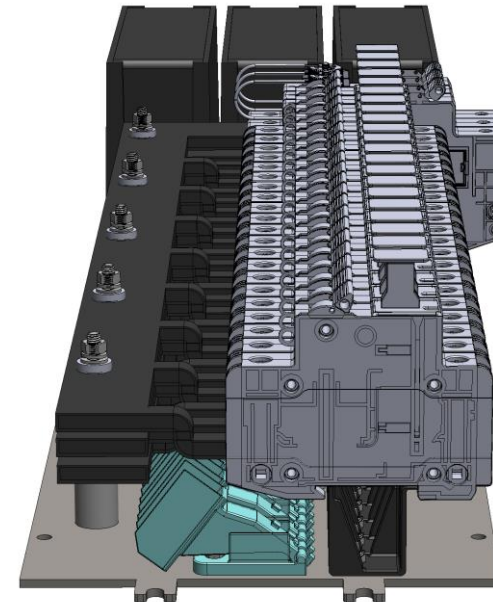


Main Incoming Molded Case Breakers

Schneider-SqD, Eaton-Cutler Hammer, Siemens, GE, ABB, Rockwell, WEG, LG/LS, Noark

Branch Miniature Circuit Breakers

ABB	S200U	Rockwell	MCA/MCB/MCEA/MCGA
ABB	S200UP	Rockwell	1489M
ABB	SU200M	Schneider	Multi 9 C120
ABB	S800U	Schneider	Multi 9 C60
Altech	L	Siemens	5SJ4 HG41
Altech	UL	Siemens	5SJ4 HG42
Carlo Gavazzi	GMB	Siemens	BQ/BQH/HQB
Carlo Gavazzi	GMBH	Sprecher + Schuh	L9
CBI	QL	SqD	QOU
Eaton	FAZ	Techna	Jtec
Eaton	QC/QCD/QCR/QCGF	WEG	UMBW
ETA	4230	Weidmuller	BR
GE	TQC/THQC/THHQC		
GE/AEG	EP 100ULH		
Nader	NDB2T		
Noark	B1H		
Noark	B1N		



MCA FABRICATION UL67 & CSA22.2 Panelboard Assemblies



Mechanical Characteristics

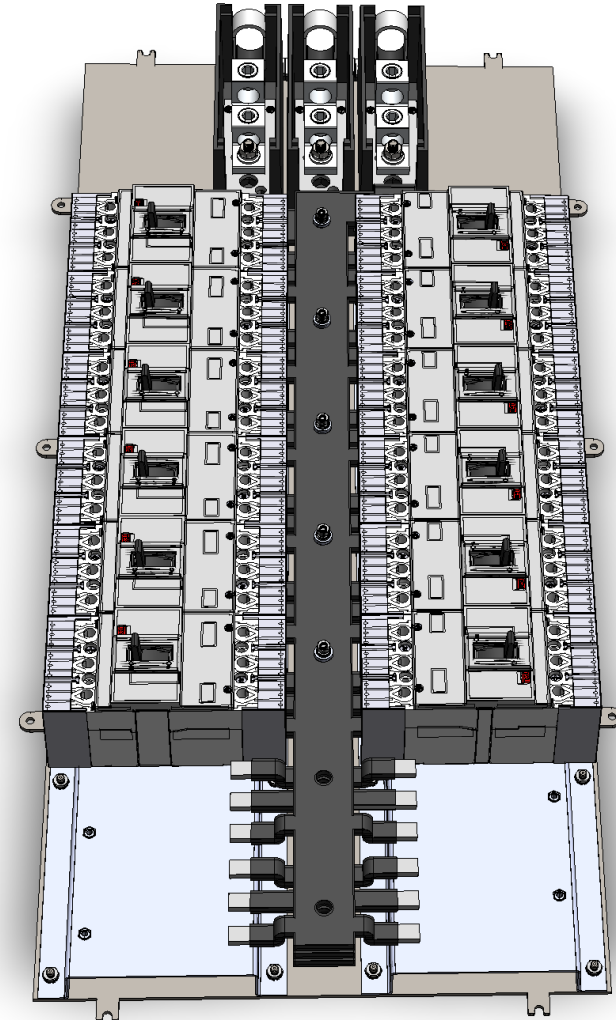
US Patent Number	9,197,039 / 9,293,897 / Third Patent Pending
cULus Certification	UL67, CSA22.2
IEC Certification	IEC60529 IP20 Pending
Touchsafe Design	Personnel have no exposure to energized components during servicing or operating any portion of the system

Electrical Characteristics

System Ampacity	400A, 600A, 800A
Branch Circuit Ampacity	150A, 225A, 250A
Voltage Rating	120, 240, 277, 480, 575, 600VAC
Voltage Type	Delta or Wye / 1ph or 3ph / 2,3, or 4 wire
Withstand	10kA to 65kA
Neutral	100% or 200% / Linear or Non-linear Loads

Configurations

Enclosure	UL50 Type 1
Interior Only	Available as Single Unit
Main Incoming	Main Lug or Main Breaker
Single Cable	#4-4/0 Compression Lug
Single Cable	#4-4/0 Crimp Lug
Parallel Cables	#8-1/0 Compression Lug
Parallel Cables	#8-1/0 Crimp Lug
Branch Configuration	Single or Double Column
Circuits	12, 24, 36, 48, 60, 72, 84



CERTIFICATION COMPLETE JULY 2023

MCA FABRICATION Circuit Breakers and Fuses



E-T-A
10kA 120/480V



ORDERING CODE CIRCUIT BREAKER

Product

FHCB Circuit Breaker

Series

ETAB ETA

Configuration

- 1P 1 Pole
- 2P 2 Pole
- 3P 3 Pole

Voltage

480V 120/240/277/480VAC & 125VDC

Curve

- B Short
- C Medium
- D Long

Ampacity

- 1A
- 2A
- 5A
- 10A
- 15A
- 20A
- 25A
- 30A
- 35A
- 40A
- 50A
- 60A

FHCB - ETAB - 2P 480V - B 30A Ordering Example

Hongfa
10kA 120V



ORDERING CODE CIRCUIT BREAKER

Product

FHCB Circuit Breaker

Series

HOFA Hongfa

Configuration

- 1P 1 Pole
- 2P 2 Pole
- 3P 3 Pole

Voltage

240V 120/240VAC

Ampacity

- 10A
- 15A
- 20A
- 30A
- 40A
- 50A
- 60A

FHCB - HOFA - 2P 240V - 30A Ordering Example

Mersen
200kA 120/480V



ORDERING CODE FUSED SWITCH

Product

FHFS Fused Switch

Series

MERS Mersen

Configuration

- 1P 1 Pole
- 2P 2 Pole
- 3P 3 Pole

Voltage

600V 120/240/480VAC & 125VDC

Ampacity

- 30A

FHCB - MERS - 2P 600V - 30A Ordering Example

MCA FABRICATION Enclosed Disconnects



Characteristics

Partner	Socomec
Ampacity	30A, 60A, 100A, 200A, 350A, 400A, 600A, 800A
Voltage	Up to 600VAC/VDC
Certification	UL508A
Configuration	Fused, Non-Fused, Transfer
Accessories	Ground Bar, Monitoring

