



REX POWER MAGNETICS

MINI POWER CENTER

Simple Elegant Smart

Encapsulated transformer complete with primary circuit breaker protection and secondary main breaker distribution loadcenter

Save Time: Pre-wired, ready for hook up

Save Space: Compact wall mountable configuration

Save Money: Installing one component versus three



Publication Date: 2/2021

Rex Power Magnetics Mini Power Center - Introduction



Practical, time saving, and customizable!

Rex Power Magnetics' Mini Power Centers combine three individual components into a single pre-wired assembly: a primary main breaker, an encapsulated isolation transformer, and a main breaker load center. With all of the components installed and factory wired in a single rugged enclosure, field installation time is reduced and simplified extensively. Mini Power Centers are used on single-phase and three-phase low voltage distribution systems and loads requiring 208Y/120V three-phase or 120/240V single-phase. While the Load Center is normally shipped without the secondary branch breakers, Rex can supply and install them if a panel schedule is provided.

Shown on brackets for display only. Floor mounting is optionally available.

Part Numbering System

MP3 C 45 H-M / ... /



Product Type

MP1	1 phase Mini Power Center
MP3	3 phase Mini Power Center

Transformer Conductor Material

C	Copper
A	Aluminum

kVA Rating

1 phase kVA levels:

5	7.5	10	15	25	30
---	-----	----	----	----	----

3 phase kVA levels:

9	15	22.5	30	45
---	----	------	----	----

Primary Voltage

A	120	C1	230	G	416	J	600
A1	115	C2	220	G1	400	J1	575
A2	110	D	277	H	480	J2	550
B	208	E	347	H1	460		
C	240	F	380	H2	440		

For any other voltage use X (600 V max).

Secondary Voltage

M	208Y/120	or	K	120/240
---	----------	----	---	---------

Optional Special Features

50	50/60 Hz system frequency
BB	Branch breakers supplied (per request)
BO	Bolt on breaker load center
CLC	Copper bus load center
E4	Type 4 rating
E4X	Type 4X enclosure (SS 304 or 316L)
T80	80 °C rise
T115	115 °C rise
S1	Single electrostatic shield

for all other custom requirements use X...

X	Special specification breaker(s)
	Specified breakers (Rex to supply)
	Special paint color
	Special low loss (high efficiency)
	Special tags and markings
	Thermostat(s)
	Special dimensions
	Floor mounting

Rex Power Magnetics Mini Power Center - Specifications

Transformer

Standard Rex Power Magnetics copper wound encapsulated transformer

- ◆ 1Ø up to 30 kVA, 3Ø up to 45 kVA, 600 V max.
- ◆ Transformer is completely encapsulated in polyester resin and silica sand, with only terminals and taps protruding from block.
- ◆ 200 °C insulation class.
- ◆ 130 °C winding temperature rise (115 °C and 80 °C available)
- ◆ Terminals are labelled, taps are cleaned for connection.

Primary Breaker

Molded Case Circuit Breaker (MCCB) for primary side protection

- ◆ Standard Eaton FDB and EHD primary breakers are used with 14 kA interrupting current capacity.
- ◆ Optional Eaton FD, HFD, and FDC breakers may be specified for 18 kA, 25 kA, and 35 kA interrupting current.
- ◆ Square D, GE, or other components may be specified.

Secondary Main Breaker Load Center

Molded Case Circuit Breaker (MCCB) for secondary side protection

- ◆ Space for up to 30 secondary branch breakers (see table).
- ◆ Secondary branch circuit breakers may be supplied and installed per customer panel schedule (optional)
- ◆ Load center is suitable for Eaton Type BR Push-on breakers, or optionally suitable for Eaton Type BAB Bolt-on breakers
- ◆ Square D, GE, or other components may be specified.
- ◆ Neutral bar is grounded to enclosure

Enclosure

- ◆ Wall-mounting
- ◆ Padlockable quarter-turn for panel
- ◆ Standard enclosure: Type 3R indoor/outdoor
- ◆ Optionally available:
 - ◆ Tamperproof hardware
 - ◆ Type 3R Stainless Steel,
 - ◆ Type 4 (totally enclosed)
 - ◆ Type 4X (totally enclosed, stainless steel, 304 or 316L)
 - ◆ Floor mounting brackets or provisions

Applications

- ◆ Industrial Loads (factory, laboratory, etc)
- ◆ Commercial (EV charging, parking lots, etc.)
- ◆ Temporary Power (rental application, generator power)
- ◆ Tunnel Power (emergency power, tunnel lighting, mining)
- ◆ General Purpose (lighting, distribution, etc.)

Approvals & Certifications



CSA Certified
File No.: LR 34493



UL Listed
File No.: E495724



ISO 9001:2015
Rex is registered to
ISO 9001: 2015



ABS, CE, and others
available.



Typical appearance for larger sizes



Typical appearance for smaller sizes

Tables & Diagrams

Aluminum Bus & Push-On Breaker Load Center MPC (CSA & UL)

Type	Catalog #	kVA	Diagram*	Pri. Breaker	Sec. Breaker	Breakers [Max quantity]			Dimensions (Type 3R)				
						1-pole	2-pole	3-pole	W [inch]	D [inch]	H [inch]	wt [lbs]	Enclosure Name
Single Phase 600 V to 120/ 240 V	MP1C5J-K	5	1	20A ¹	25A ³	12	6	-	17.25	12.5	39.5	265	E3R-1PMPC-1
	MP1C7J-K	7.5	1	30A ¹	40A ³	12	6	-	17.25	12.5	39.5	275	E3R-1PMPC-1
	MP1C10J-K	10	2	40A ¹	50A ³	20	10	-	17.25	14.5	50.5	345	E3R-1PMPC-2
	MP1C15J-K	15	2	60A ¹	70A ³	20	10	-	17.25	14.5	50.5	375	E3R-1PMPC-2
	MP1C25J-K	25	2	100A ¹	125A ³	30	14	-	18.00	14.5	59.5	570	E3R-1PMPC-3
	MP1C30J-K	30	2	100A ¹	150A ⁵	30	14	-	24.00	16.0	60.5	780	E3R-1PMPC-4
Single Phase 480 V to 120/ 240 V	MP1C5H-K	5	1	20A ²	25A ³	12	6	-	17.25	12.5	39.5	265	E3R-1PMPC-1
	MP1C7H-K	7.5	1	30A ²	40A ³	12	6	-	17.25	12.5	39.5	275	E3R-1PMPC-1
	MP1C10H-K	10	2	40A ²	50A ³	20	10	-	17.25	14.5	50.5	345	E3R-1PMPC-2
	MP1C15H-K	15	2	60A ²	70A ³	20	10	-	17.25	14.5	50.5	375	E3R-1PMPC-2
	MP1C25H-K	25	2	100A ²	125A ³	30	14	-	18.00	14.5	59.5	570	E3R-1PMPC-3
	MP1C30H-K	30	2	125A ²	150A ⁵	30	14	-	24.00	16.0	60.5	780	E3R-1PMPC-4
Three Phase 600 V to 208Y/ 120 V	MP3C9J-M	9	3	20A ¹	30A ³	12	6	4	18.00	12.5	43.5	315	E3R-3PMPC-1
	MP3C15J-M	15	4	30A ¹	50A ³	27	13	9	23.25	14.0	52.5	475	E3R-3PMPC-2
	MP3C22J-M	22.5	4	50A ¹	70A ³	27	13	9	23.25	18.0	55.0	630	E3R-3PMPC-3
	MP3C30J-M	30	4	70A ¹	100A ³	27	13	9	23.25	18.0	55.0	710	E3R-3PMPC-3
	MP3C45J-M	45	4	90A ¹	150A ⁴	30	14	10	25.50	18.0	65.5	960	E3R-3PMPC-4
Three Phase 480V to 208Y/ 120 V	MP3C9H-M	9	3	25A ²	30A ³	12	6	4	18.00	12.5	43.5	315	E3R-3PMPC-1
	MP3C15H-M	15	4	40A ²	50A ³	27	13	9	23.25	14.0	52.5	475	E3R-3PMPC-2
	MP3C22H-M	22.5	4	60A ²	70A ³	27	13	9	23.25	18.0	55.0	630	E3R-3PMPC-3
	MP3C30H-M	30	4	80A ²	100A ³	27	13	9	23.25	18.0	55.0	710	E3R-3PMPC-3
	MP3C45H-M	45	4	125A ¹	150A ⁴	30	14	10	25.50	18.0	65.5	960	E3R-3PMPC-4

*See back page for Electrical Connection Diagrams

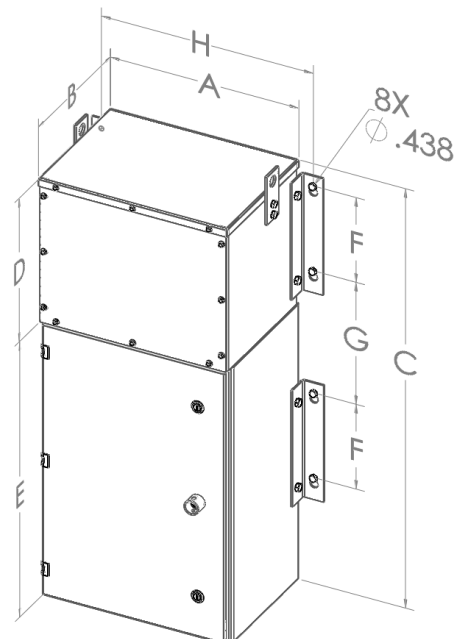
1. Eaton Type FDB Breaker
2. Eaton Type EHD Breaker
3. Eaton Type BR Breaker
4. Eaton Type CC Breaker
5. Eaton Type CSR Breaker

Dimensions [inches]

Enclosure Name	A	B	C	D	E	F	G	H
E3R-1PMPC-1	17.25	12.50	39.50	13.56	29.94	8.00	11.50	19.38
E3R-1PMPC-2	17.25	14.50	50.50	16.56	33.94	8.00	18.50	19.38
E3R-1PMPC-3	18.00	14.50	59.50	23.56	35.94	8.00	26.50	20.13
E3R-1PMPC-4	24.00	16.00	60.50	23.56	36.94	8.00	27.00	26.13
E3R-3PMPC-1	18.00	12.50	43.50	15.56	27.94	8.00	14.50	20.13
E3R-3PMPC-2	23.25	14.00	52.50	16.06	36.44	8.00	19.25	25.38
E3R-3PMPC-3	23.25	18.00	55.00	18.56	36.44	8.00	21.75	25.38
E3R-3PMPC-4	25.50	18.00	65.50	23.56	41.94	8.00	29.50	27.63

Get detail cut sheets (drawings) for each of our standard sizes:

www.rexpowermagnetics.com



Tables & Diagrams

Copper Bus & Bolt-On Breaker Load Center MPC (CSA only)

Type	Catalog #	kVA	Diagram*	Pri. Breaker	Sec. Breaker	Breakers [Max quantity]			Dimensions (Type 3R)				
						1-pole	2-pole	3-pole	W [inch]	D [inch]	H [inch]	wt [lbs]	Enclosure Name
Single Phase 600 V to 120/240 V	MP1C5J-K/BO/CLC	5	1	20A ¹	25A ⁶	18	8	-	23.25	12.5	43.5	335	E3R-1PMPC-1B
	MP1C7J-K/BO/CLC	7.5	1	30A ¹	40A ⁶	18	8	-	23.25	12.5	43.5	345	E3R-1PMPC-1B
	MP1C10J-K/BO/CLC	10	2	40A ¹	50A ⁶	30	14	-	23.25	14.5	53.0	455	E3R-1PMPC-2B
	MP1C15J-K/BO/CLC	15	2	60A ¹	70A ⁶	30	14	-	23.25	14.5	53.0	485	E3R-1PMPC-2B
	MP1C25J-K/BO/CLC	25	2	100A ¹	125A ⁶	30	14	-	23.25	14.5	60.0	635	E3R-1PMPC-3B
	MP1C30J-K/BO/CLC	30	2	100A ¹	150A ⁷	30	14	-	23.25	16.0	65.0	750	E3R-1PMPC-4B
Single Phase 480 V to 120/ 240 V	MP1C5H-K/BO/CLC	5	1	20A ²	25A ⁶	18	8	-	23.25	12.5	43.5	335	E3R-1PMPC-1B
	MP1C7H-K/BO/CLC	7.5	1	30A ²	40A ⁶	18	8	-	23.25	12.5	43.5	345	E3R-1PMPC-1B
	MP1C10H-K/BO/CLC	10	2	40A ²	50A ⁶	30	14	-	23.25	14.5	53.0	455	E3R-1PMPC-2B
	MP1C15H-K/BO/CLC	15	2	60A ²	70A ⁶	30	14	-	23.25	14.5	53.0	485	E3R-1PMPC-2B
	MP1C25H-K/BO/CLC	25	2	100A ²	125A ⁶	30	14	-	23.25	14.5	60.0	635	E3R-1PMPC-3B
	MP1C30H-K/BO/CLC	30	2	125A ¹	150A ⁷	30	14	-	23.25	16.0	65.0	750	E3R-1PMPC-4B
Three Phase 600 V to 208Y/ 120 V	MP3C9J-M/BO/CLC	9	3	20A ¹	30A ⁶	18	8	6	23.25	12.5	45.5	395	E3R-3PMPC-1B
	MP3C15J-M/BO/CLC	15	4	30A ¹	50A ⁶	30	14	10	23.25	14.0	52.5	520	E3R-3PMPC-2B
	MP3C22J-M/BO/CLC	22.5	4	50A ¹	70A ⁶	30	14	10	23.25	18.0	55.0	710	E3R-3PMPC-3B
	MP3C30J-M/BO/CLC	30	4	70A ¹	100A ⁶	30	14	10	23.25	18.0	55.0	780	E3R-3PMPC-3B
	MP3C45J-M/BO/CLC	45	4	90A ¹	150A ⁷	30	14	10	25.50	18.0	65.0	1000	E3R-3PMPC-4B
Three Phase 480V to 208Y/ 120 V	MP3C9H-M/BO/CLC	9	3	25A ²	30A ⁶	18	8	6	23.25	12.5	45.5	395	E3R-3PMPC-1B
	MP3C15H-M/BO/CLC	15	4	40A ²	50A ⁶	30	14	10	23.25	14.0	52.5	520	E3R-3PMPC-2B
	MP3C22H-M/BO/CLC	22.5	4	60A ²	70A ⁶	30	14	10	23.25	18.0	55.0	710	E3R-3PMPC-3B
	MP3C30H-M/BO/CLC	30	4	80A ²	100A ⁶	30	14	10	23.25	18.0	55.0	780	E3R-3PMPC-3B
	MP3C45H-M/BO/CLC	45	4	125A ¹	150A ⁷	30	14	10	25.50	18.0	65.0	1000	E3R-3PMPC-4B

*See back page for Electrical Connection Diagrams

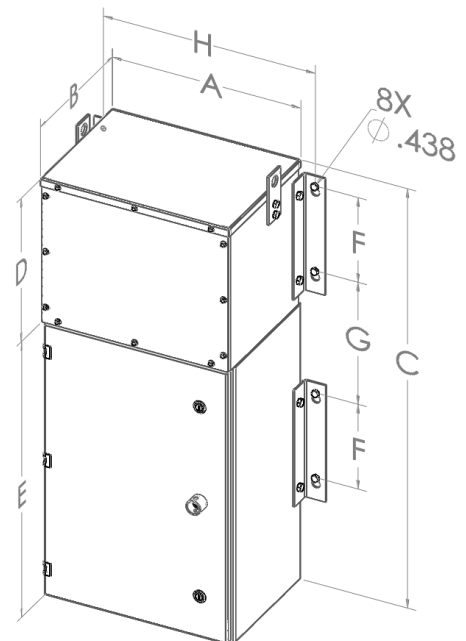
1. Eaton Type FDB Breaker
2. Eaton Type EHD Breaker
6. Eaton Type BAB Breaker
7. Eaton Type ED Breaker

Dimensions [inches]

Enclosure Name	A	B	C	D	E	F	G	H
E3R-1PMPC-1B	23.25	12.50	43.50	13.56	29.94	8.00	11.50	25.38
E3R-1PMPC-2B	23.25	14.50	53.00	16.56	36.44	8.00	18.50	25.38
E3R-1PMPC-3B	23.25	14.50	60.00	23.56	36.44	8.00	26.50	25.38
E3R-1PMPC-4B	23.25	16.00	65.00	23.56	41.44	8.00	27.00	25.38
E3R-3PMPC-1B	23.25	12.50	45.50	15.56	29.94	8.00	14.50	25.38
E3R-3PMPC-2B	23.25	14.00	52.50	16.06	36.44	8.00	19.25	25.38
E3R-3PMPC-3B	23.25	18.00	55.00	18.56	36.44	8.00	21.75	25.38
E3R-3PMPC-4B	25.50	18.00	65.00	23.56	41.44	8.00	29.50	27.63

Get detail cut sheets (drawings) for each of our standard sizes:

www.rexpowermagnetics.com



Electrical Connection Diagrams

Diagram 1

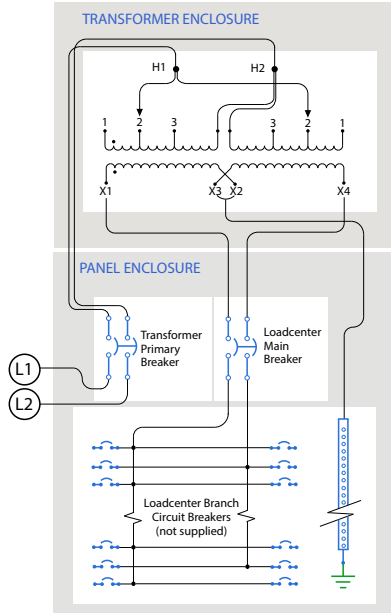


Diagram 2

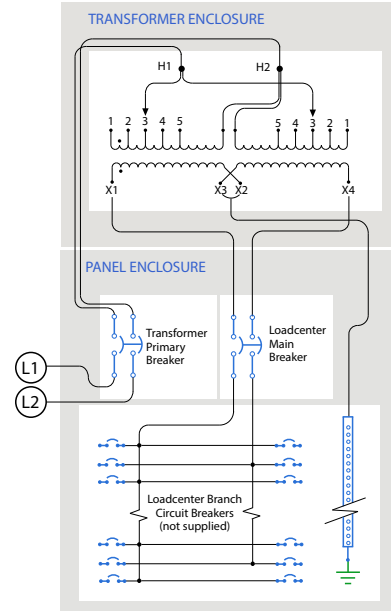


Diagram 3

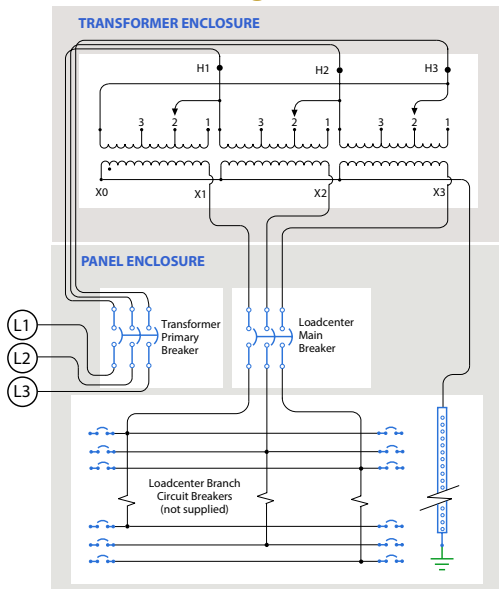
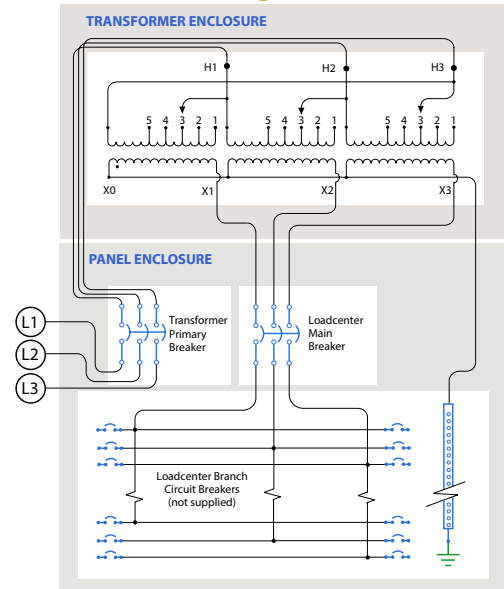


Diagram 4



- Diagrams above are for illustrative purposes only and are not intended to serve as a reference electrical schematic for wiring.

Contact our Sales Team

Use our website to find your local sales representative:

www.rexpowermagnetics.com

Canadian Sales & Inquiries

1-800-387-2840

sales@rexpowermagnetics.com

USA Sales & Inquiries

774-571-9479

bobcannon@rexpowermagnetics.com

